

10/716, 165

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: ssspta1201txs

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

10/716, 165

NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 10:56:56 ON 15 MAR 2005

FILE 'REGISTRY' ENTERED AT 10:57:05 ON 15 MAR 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 MAR 2005 HIGHEST RN 845540-96-7
DICTIONARY FILE UPDATES: 14 MAR 2005 HIGHEST RN 845540-96-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

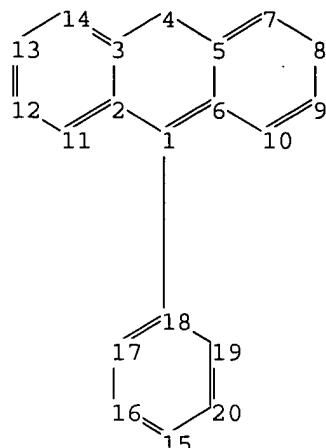
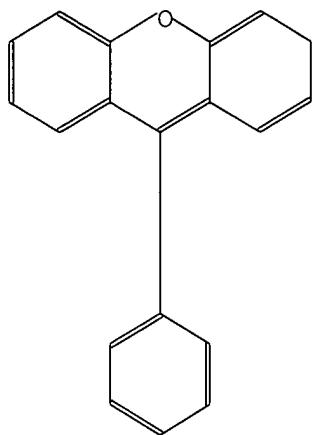
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>
Uploading C:\Program Files\Stnexp\Queries\107161652.str

10/716,165



ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
chain bonds :
1-18
ring bonds :
1-2 1-6 2-3 2-11 3-4 3-14 4-5 5-6 5-7 6-10 7-8 8-9 9-10 11-12 12-13
13-14 15-16 15-20 16-17 17-18 18-19 19-20
exact/norm bonds :
1-2 1-6 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10
exact bonds :
1-18
normalized bonds :
2-3 2-11 3-14 11-12 12-13 13-14 15-16 15-20 16-17 17-18 18-19 19-20
isolated ring systems :
containing 15 :

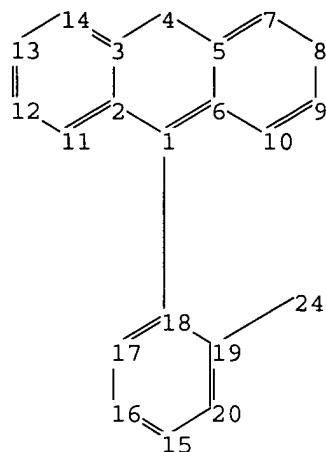
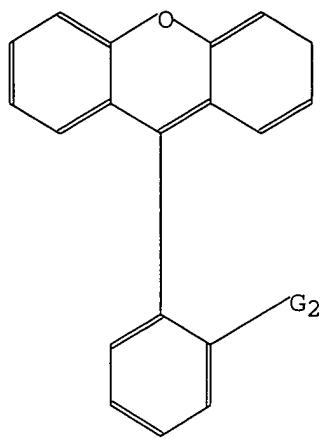
G1:O,OH,NH,NH2

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:Atom

L1 STRUCTURE UPLOADED

=>
Uploading C:\Program Files\Stnexp\Queries\107161653.str

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chain nodes :

24

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

chain bonds :

1-18 19-24

ring bonds :

1-2 1-6 2-3 2-11 3-4 3-14 4-5 5-6 5-7 6-10 7-8 8-9 9-10 11-12 12-13
13-14 15-16 15-20 16-17 17-18 18-19 19-20

exact/norm bonds :

1-2 1-6 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 19-24

exact bonds :

1-18

normalized bonds :

2-3 2-11 3-14 11-12 12-13 13-14 15-16 15-20 16-17 17-18 18-19 19-20

isolated ring systems :

containing 15 :

G1:O,OH,NH,NH2

G2:CO2H,COOH,SO3H

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:Atom 24:CLASS

L2 STRUCTURE UPLOADED

=> s 12
SAMPLE SEARCH INITIATED 11:03:13 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 427 TO ITERATE

100.0% PROCESSED 427 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

50 ANSWERS

10/716,165

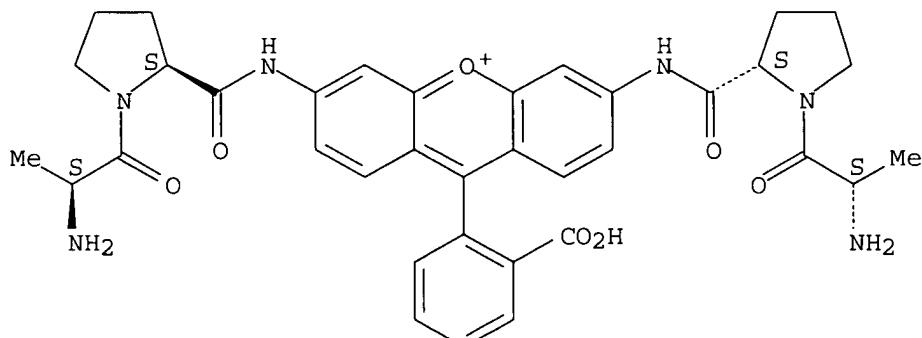
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 7301 TO 9779
PROJECTED ANSWERS: 3727 TO 5553

L3 50 SEA SSS SAM L2

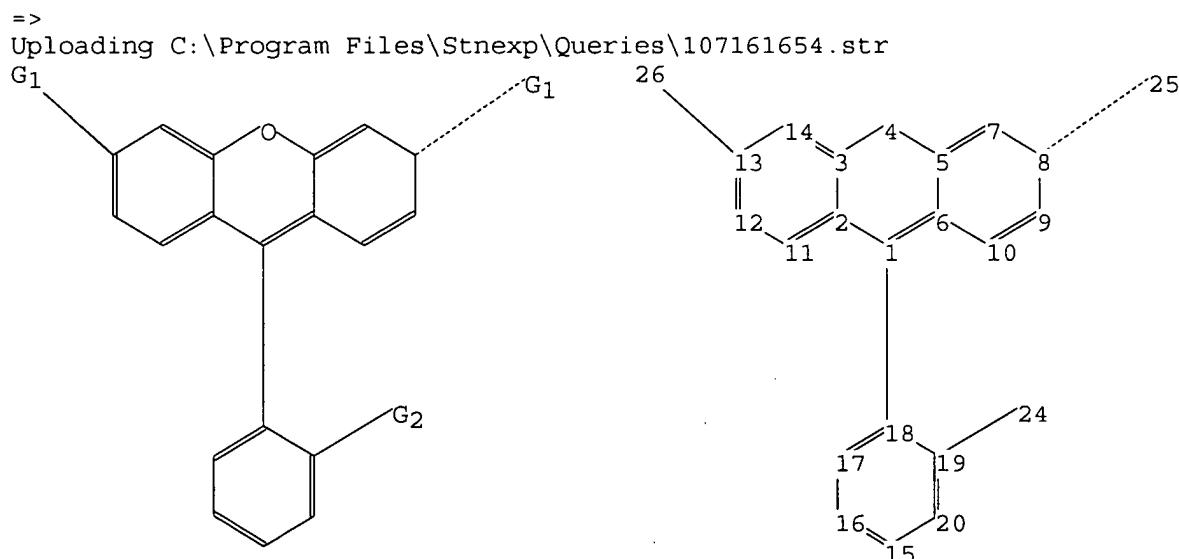
=> d scan

L3 50 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Xanthylium, 3,6-bis[[[(2S)-1-[(2S)-2-amino-1-oxopropyl]-2-pyrrolidinyl]carbonyl]amino]-9-(2-carboxyphenyl)- (9CI)
MF C36 H39 N6 O7
CI COM

Absolute stereochemistry.



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0



chain nodes :

24 25 26

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

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chain bonds :
1-18 8-25 13-26 19-24
ring bonds :
1-2 1-6 2-3 2-11 3-4 3-14 4-5 5-6 5-7 6-10 7-8 8-9 9-10 11-12 12-13
13-14 15-16 15-20 16-17 17-18 18-19 19-20
exact/norm bonds :
1-2 1-6 3-4 4-5 5-6 5-7 6-10 7-8 8-9 8-25 9-10 13-26 19-24
exact bonds :
1-18
normalized bonds :
2-3 2-11 3-14 11-12 12-13 13-14 15-16 15-20 16-17 17-18 18-19 19-20
isolated ring systems :
containing 15 :

G1:O,OH,NH,NH2,N

G2:CO2H,COOH,SO3H

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:Atom 24:CLASS 25:CLASS 26:CLASS

L4 STRUCTURE UPLOADED

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SAMPLE SEARCH INITIATED 11:08:13 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 248 TO ITERATE

100.0% PROCESSED 248 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

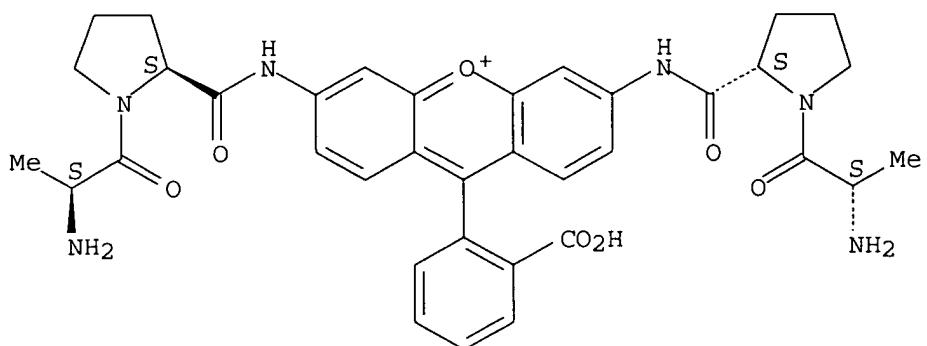
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 4016 TO 5904
PROJECTED ANSWERS: 2689 TO 4271

L5 50 SEA SSS SAM L4

=> d scan

L5 50 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Xanthylium, 3,6-bis[[[(2S)-1-[(2S)-2-amino-1-oxopropyl]-2-pyrrolidinyl]carbonyl]amino]-9-(2-carboxyphenyl)-(9CI)
MF C36 H39 N6 O7
CI COM

Absolute stereochemistry.

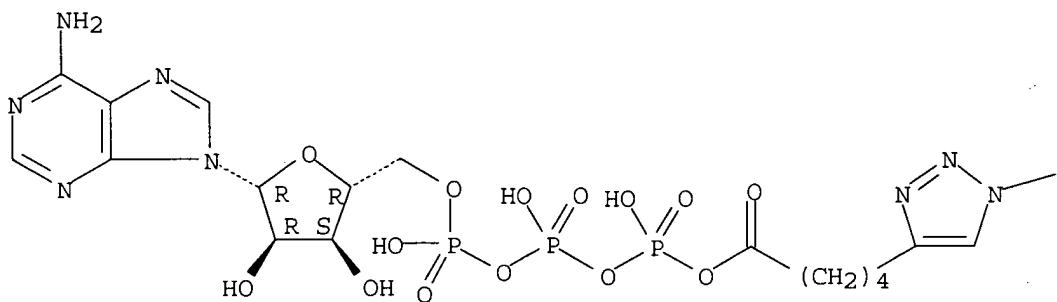


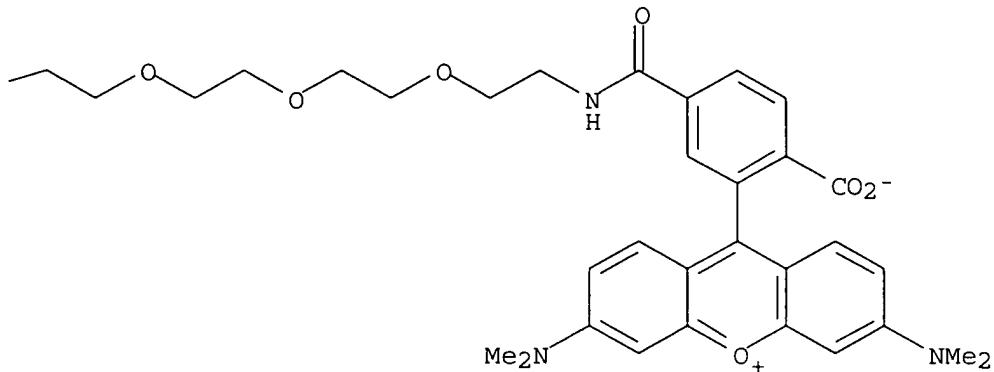
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L5 50 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Adenosine 5'-(tetrahydrogen triphosphate), P''-anhydride with
9-[2-carboxy-5-[13-[4-(4-carboxybutyl)-1H-1,2,3-triazol-1-yl]-1-oxo-5,8,11-
trioxa-2-azatridec-1-yl]phenyl]-3,6-bis(dimethylamino)xanthylum inner
salt (9CI)
MF C50 H62 N11 O21 P3

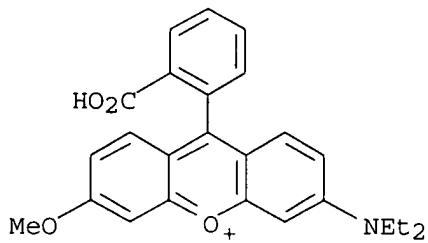
Absolute stereochemistry.

PAGE 1-A

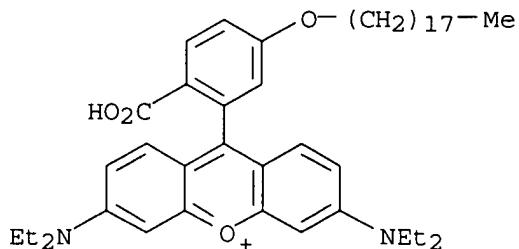




L5 50 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Xanthylium, 9-(2-carboxyphenyl)-3-(diethylamino)-6-methoxy- (9CI)
 MF C25 H24 N O4
 CI COM



L5 50 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
 IN Xanthylium, 9-[2-carboxy-5-(octadecyloxy)phenyl]-3,6-bis(diethylamino)- (9CI)
 MF C46 H67 N2 O4
 CI COM



10/716,165

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s 14 ful
FULL SEARCH INITIATED 11:08:59 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 5006 TO ITERATE

100.0% PROCESSED 5006 ITERATIONS 3644 ANSWERS
SEARCH TIME: 00.00.01

L6 3644 SEA SSS FUL L4

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 169.50 169.71

FILE 'CAPLUS' ENTERED AT 11:09:10 ON 15 MAR 2005
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FILE COVERS 1907 - 15 Mar 2005 VOL 142 ISS 12
FILE LAST UPDATED: 14 Mar 2005 (20050314/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 16
L7 23922 L6

=> s 17 and label?
413269 LABEL?
L8 4605 L7 AND LABEL?

=> s 18 and (process or method or synthes? or prepar?)
2060830 PROCESS
1374299 PROCESSES
3065131 PROCESS
(PROCESS OR PROCESSES)
2801502 METHOD
1164914 METHODS
3638293 METHOD
(METHOD OR METHODS)
1433499 SYNTHEZ?
1534101 PREPAR?

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115055 PREP
2025 PREPS
116881 PREP
(PREP OR PREPS)
1918786 PREPD
21 PREPDS
1918801 PREPD
(PREPD OR PREPDS)
106004 PREPG
12 PREPGS
106015 PREPG
(PREPG OR PREPGS)
2557303 PREPN
198667 PREPNS
2707792 PREPN
(PREPN OR PREPNS)
4488110 PREPAR?
(PREPAR? OR PREP OR PREPD OR PREPG OR PREPN)
L9 3332 L8 AND (PROCESS OR METHOD OR SYNTHES? OR PREPAR?)

=> s l9 and link?
414900 LINK?
L10 465 L9 AND LINK?

=> s l10 and substrate
791833 SUBSTRATE
363813 SUBSTRATES
989690 SUBSTRATE
(SUBSTRATE OR SUBSTRATES)

L11 58 L10 AND SUBSTRATE

=> d l11 ibib hitstr abs 1-58

L11 ANSWER 4 OF 58 CAPIUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:98641 CAPIUS
DOCUMENT NUMBER: 142:193892
TITLE: Protein and peptide sensors using electrical detection
methods
INVENTOR(S): Sawyer, Jaymie Robin; Li, Changming; Choong, Vi-en;
Maracas, George; Zhang, Peiming
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 22 pp., Cont.-in-part of U.S.
Ser. No. 506,178.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005023155	A1	20050203	US 2003-203874	20030609
US 6824669	B1	20041130	US 2000-506178	20000217
WO 2001061053	A2	20010823	WO 2001-US5476	20010220
WO 2001061053	A3	20020314		
WO 2001061053	C2	20021017		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,

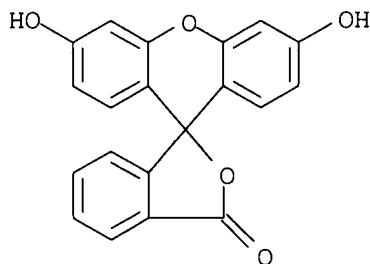
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
 YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-506178 A2 20000217
 WO 2001-US5476 W 20010220

IT 2321-07-5D, Fluorescein, conjugates with antibody
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (protein and peptide sensors using elec. detection **methods**)

RN 2321-07-5 CAPLUS

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy- (9CI)
 (CA INDEX NAME)



AB The present invention provides an apparatus and **methods** for the elec. detection of mol. interactions between a probe mol. and a protein or peptide target mol., but without requiring the use of electrochem. or other reporters to obtain measurable signals. The **methods** can be used for elec. detection of mol. interactions between probe mols. bound to defined regions of an array and protein or peptide target mols. which are permitted to interact with the probe mols. Streptavidin-modified porous hydrogel microelectrodes were **prepared**. Biotinylated antibodies to Escherichia coli were attached to the streptavidin-modified microelectrodes to make an immunosensor.

L11 ANSWER 10 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:414513 CAPLUS
 DOCUMENT NUMBER: 140:419882
 TITLE: Fluorescent peptide **substrates** for the detection of enzyme activity in biological samples
 INVENTOR(S): Packard, Beverly S.; Komoriya, Akira
 PATENT ASSIGNEE(S): OncoImmunin, Inc., USA
 SOURCE: U.S. Pat. Appl. Publ., 114 pp., Cont.-in-part of Appl. No. PCT/US00/24882.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 5
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004096926	A1	20040520	US 2001-874350	20010604
US 6037137	A	20000314	US 1997-802981	19970220

WO 9837226	A1	19980827	WO 1998-US3000	19980220
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
WO 2001018238	A1	20010315	WO 2000-US24882	20000911
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			US 1997-802981	A2 19970220
			WO 1998-US3000	A2 19980220
			US 1999-394019	A2 19990910
			WO 2000-US24882	A2 20000911

OTHER SOURCE(S) : MARPAT 140:419882

IT 212268-97-8 212268-98-9 212268-99-0
 212269-00-6 212269-01-7 212269-02-8
 212269-03-9 212269-04-0 212269-05-1
 212269-06-2 212269-07-3 212269-08-4
 212269-09-5 212269-10-8

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (cellular uptake; fluorescent peptide **substrates** for the detection of enzyme activity in biol. samples)

RN 212268-97-8 CAPLUS

CN L-Tyrosine, N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-lysyl-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
RN 212268-98-9 CAPLUS

CN L-Tyrosine, N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysyl-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

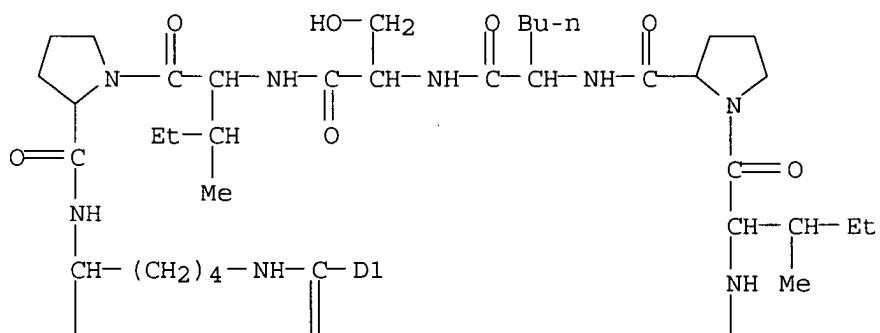
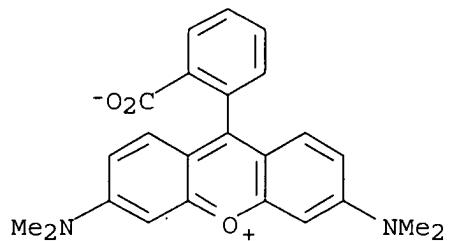
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

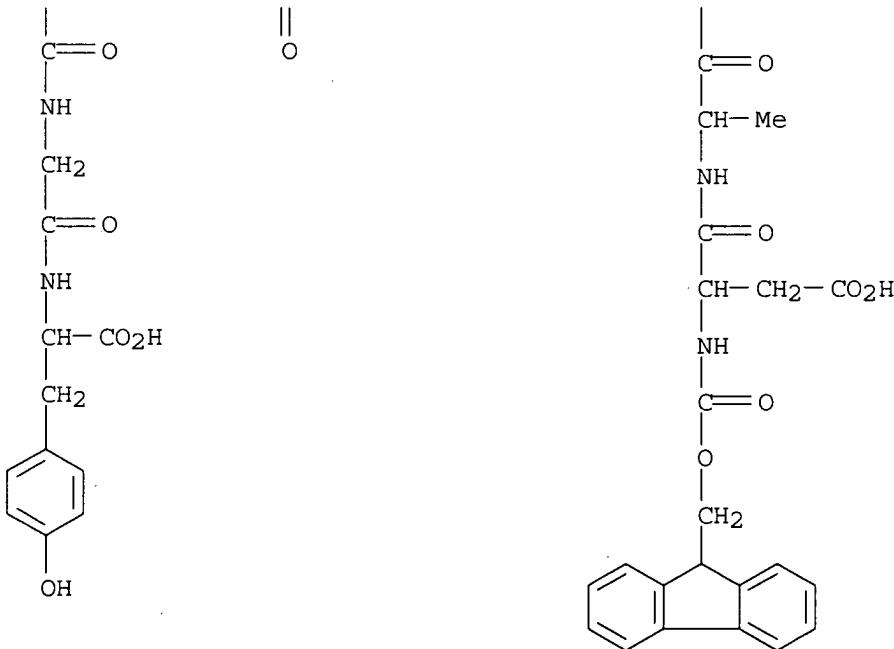
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RN 212268-99-0 CAPLUS
CN L-Tyrosine, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, inner salt (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



RN 212269-00-6 CAPLUS
 CN L-Tyrosine, N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylidium-9-yl]-4(or 3)-carboxybenzoyl]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-lysyl-L- α -

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aspartyl-2-methylalanyl-L- α -aspartyl-L- α -glutamyl-L-valyl-L- α -aspartylglycyl-L-isoleucyl-L- α -aspartyl-L-prolyl-N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 212269-01-7 CAPLUS

CN L-Tyrosine, N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysyl-L- α -aspartyl-2-methylalanyl-L- α -aspartylglycyl-L-isoleucyl-L- α -aspartyl-L-prolyl-N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

RN 212269-02-8 CAPLUS
CN L-Tyrosine, N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-lysyl-L- α -aspartyl-2-methylalanyl-L- α -aspartyl-L- α -glutamyl-L-valyl-L-asparaginylglycyl-L-isoleucyl-L- α -aspartyl-L-prolyl-N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 212269-03-9 CAPLUS

CN L-Tyrosine, N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysyl-L- α -aspartyl-2-methylalanyl-L- α -aspartyl-L- α -glutamyl-L-valyl-L-asparaginylglycyl-L-isoleucyl-L- α -aspartyl-L-prolyl-N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

RN 212269-04-0 CAPLUS

CN L-Tyrosine, N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-lysyl-L- α -aspartyl-2-methylalanyl-L- α -glutamyl-L-valyl-L- α -aspartylglycyl-L-isoleucyl-L- α -aspartyl-L-prolyl-N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 212269-05-1 CAPLUS

CN L-Tyrosine, N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysyl-L- α -aspartyl-L-tyrosyl-2-methylalanyl-L-alanyl-L- α -aspartylglycyl-L-isoleucyl-L- α -aspartyl-L-prolyl-N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 212269-06-2 CAPLUS

CN L-Tyrosine, N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-lysyl-L- α -aspartyl-2-methylalanyl-glycyl-L- α -aspartyl-L- α -glutamyl-L-valyl-L- α -aspartylglycyl-L-isoleucyl-L- α -aspartylglycyl-L-prolyl-N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 212269-07-3 CAPLUS

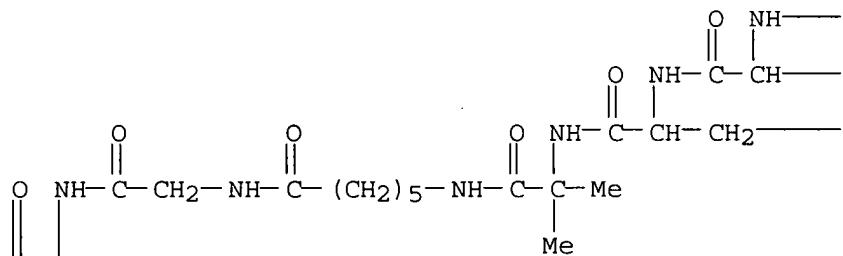
CN L-Tyrosine, N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-lysyl-L- α -aspartyl-2-methylalanyl-6-aminoxyanoylglycyl-L- α -aspartyl-L- α -glutamyl-L-valyl-L- α -aspartylglycyl-L-isoleucyl-L- α -aspartylglycyl-6-aminoxyanoyl-L-prolyl-N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 212269-08-4 CAPLUS

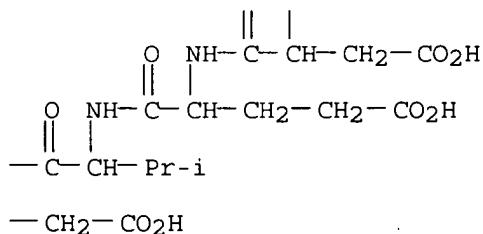
CN L-Tyrosine, N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-N2-[(phenylmethoxy)carbonyl]-L-lysyl-L- α -aspartyl-2-methylalanyl-6-aminoxyanoylglycyl-L- α -aspartyl-L- α -glutamyl-L-valyl-L- α -aspartylglycyl-L-isoleucyl-L- α -aspartylglycyl-6-aminoxyanoyl-L-prolyl-N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *



* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *



* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

RN 212269-09-5 CAPLUS

CN L-Tyrosine, N6-[3(or 4)-[3,6-bis(dimethylamino)xanthyl]imino-9-yl]-4(or 3)-carboxybenzoyl]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-lysyl-L- α -

10/716,165

aspartyl-L-tyrosyl-2-methylalanyl-L-alanyl-L- α -aspartylglycyl-L-
isoleucyl-L- α -aspartyl-L-prolyl-N6-[3(or 4)-[3,6-
bis(dimethylamino)xanthylum-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-,
bis(inner salt) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 212269-10-8 CAPLUS

CN L-Tyrosine, N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or
3)-carboxybenzoyl]-L-lysyl-L- α -aspartyl-2-methylalanyl-L- α -
glutamyl-L-valyl-L- α -aspartylglycyl-L-isoleucyl-L- α -aspartyl-L-
prolyl-N6-[3(or 4)-[3,6-bis(dimethylamino)xanthylum-9-yl]-4(or
3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

IT 2768-89-0, Rhodamine X 25152-49-2, 9-(2-Carboxyphenyl)-
2,7-dimethyl-3,6-bis(ethylamino)xanthylum 91809-66-4D, halides

91809-67-5D, halides 125481-77-8 135926-08-8

212207-37-9 212207-40-4 222164-84-3, Rh 110

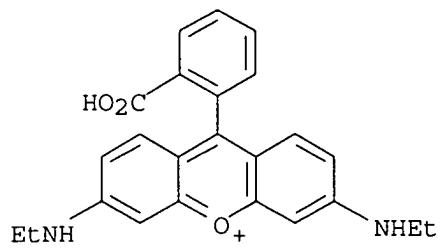
690962-76-6D, halides 690962-77-7 691868-32-3

691868-33-4 691868-34-5 691868-35-6

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(fluorescent peptide substrates for the detection of enzyme
activity in biol. samples)

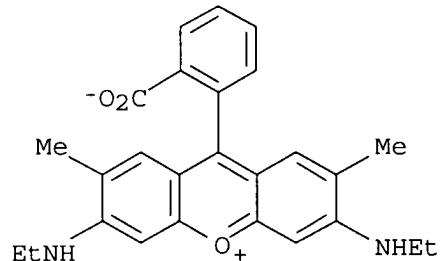
RN 2768-89-0 CAPLUS

CN Xanthylum, 9-(2-carboxyphenyl)-3,6-bis(ethylamino)-, chloride (9CI) (CA
INDEX NAME)

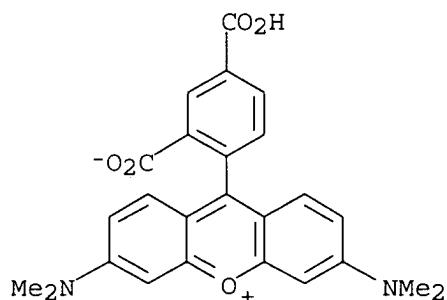


● Cl⁻

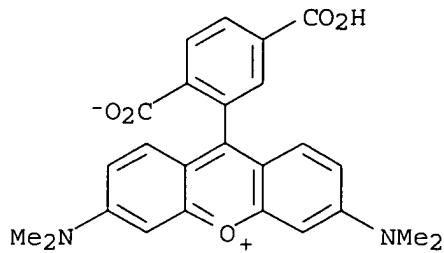
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CN Xanthylium, 9-(2-carboxyphenyl)-3,6-bis(ethylamino)-2,7-dimethyl-, inner salt (9CI) (CA INDEX NAME)



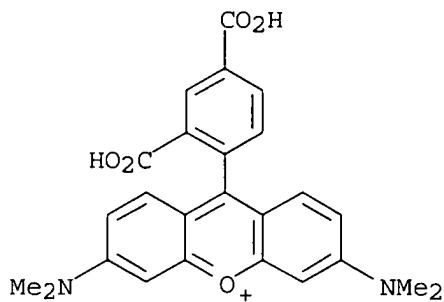
RN 91809-66-4 CAPLUS
CN Xanthylium, 9-(2,4-dicarboxyphenyl)-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)



RN 91809-67-5 CAPLUS
CN Xanthylium, 9-(2,5-dicarboxyphenyl)-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)

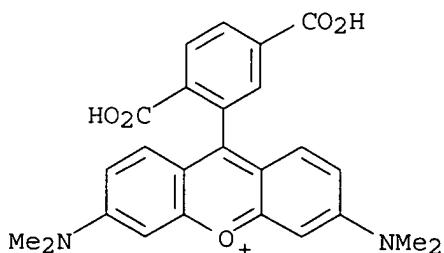


RN 125481-77-8 CAPLUS
CN Xanthylium, 9-(2,4-dicarboxyphenyl)-3,6-bis(dimethylamino)-, chloride
(9CI) (CA INDEX NAME)



● Cl⁻

RN 135926-08-8 CAPLUS
CN Xanthylium, 9-(2,5-dicarboxyphenyl)-3,6-bis(dimethylamino)-, chloride
(9CI) (CA INDEX NAME)

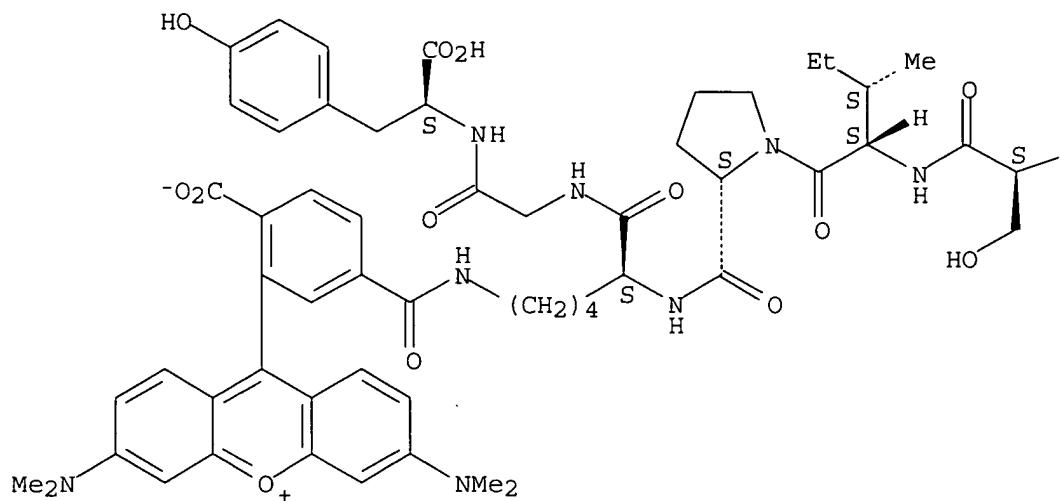


● Cl⁻

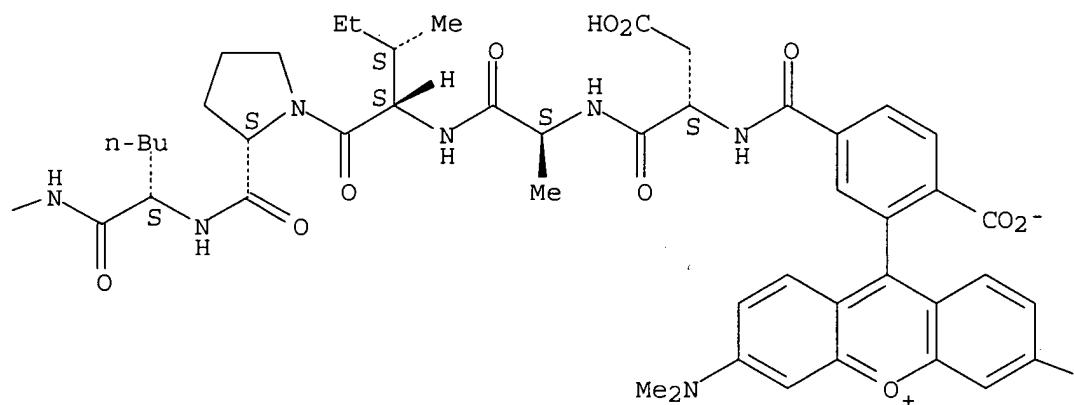
RN 212207-37-9 CAPLUS
CN L-Tyrosine, N-[3-[3,6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[3-[3,6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



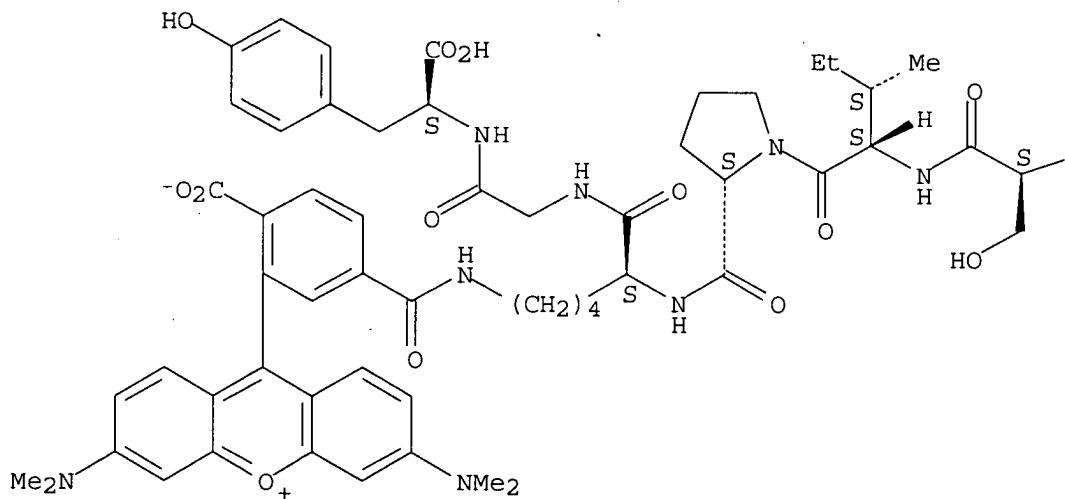
PAGE 1-B



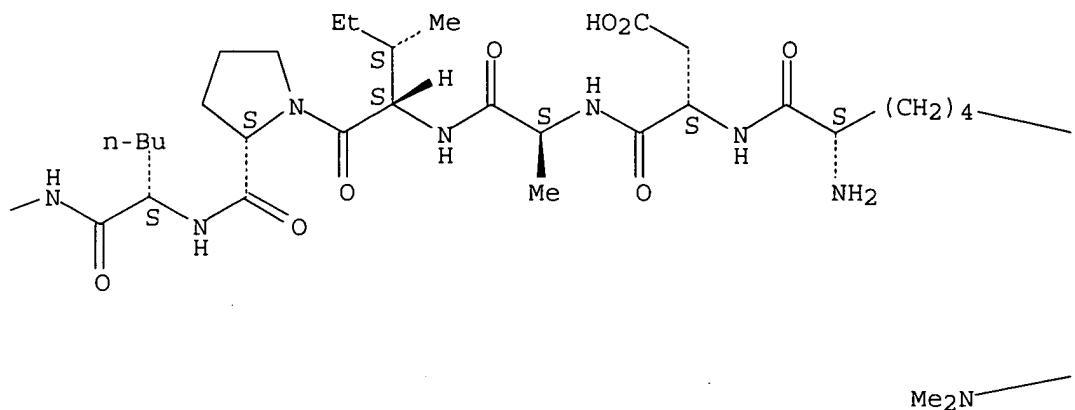
→ NMe₂

RN 212207-40-4 CAPLUS
 CN L-Tyrosine, N6-[3-[3,6-bis(dimethylamino)xanthylidium-9-yl]-4-carboxybenzoyl]-L-lysyl-L-α-aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[3-[3,6-bis(dimethylamino)xanthylidium-9-yl]-4-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

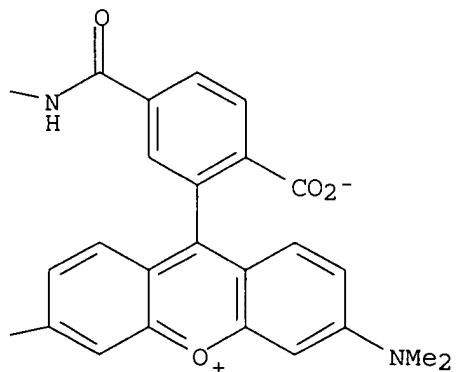


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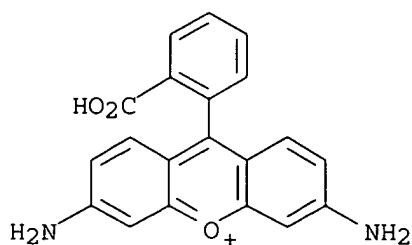
Me₂N

PAGE 1-C



RN 222164-84-3 CAPLUS

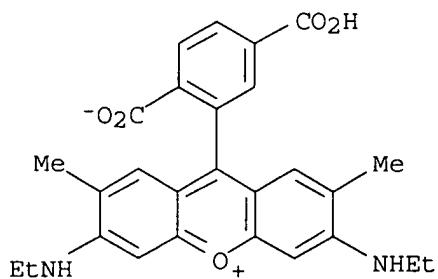
CN Xanthylium, 3,6-diamino-9-[2,4(or 2,5)-dicarboxyphenyl]-, chloride (9CI)
(CA INDEX NAME)



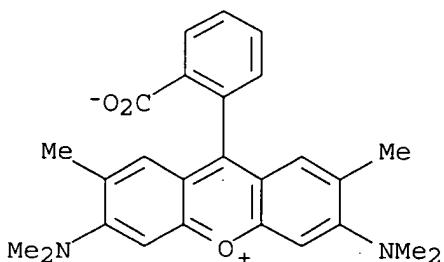
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● Cl -

RN 690962-76-6 CAPLUS
CN Xanthylium, 9-(2,5-dicarboxyphenyl)-3,6-bis(ethylamino)-2,7-dimethyl-, inner salt (9CI) (CA INDEX NAME)

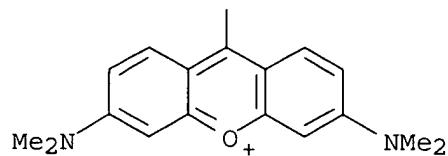
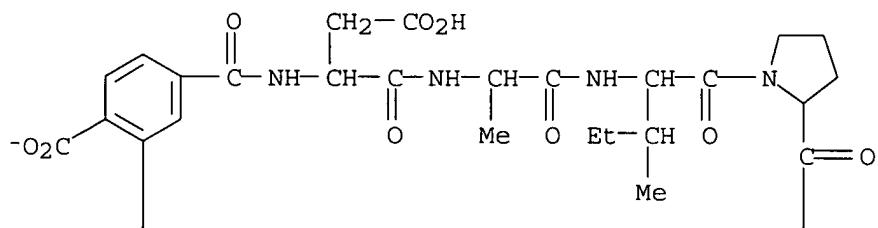
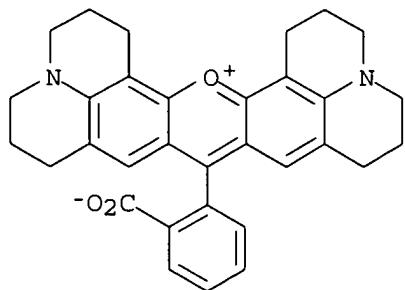


RN 690962-77-7 CAPLUS
CN Xanthylium, 9-(2-carboxyphenyl)-3,6-bis(dimethylamino)-2,7-dimethyl-, inner salt (9CI) (CA INDEX NAME)

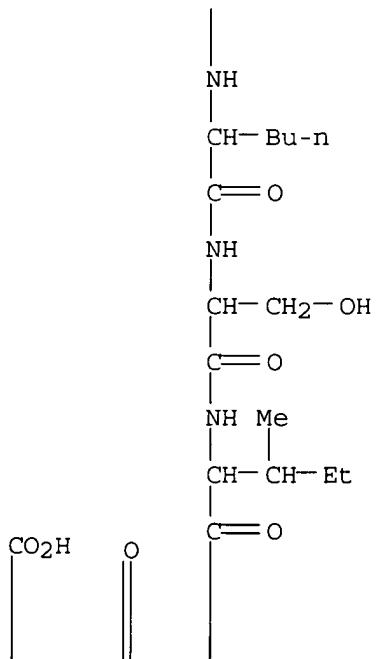


RN 691868-32-3 CAPLUS
CN L-Cysteine, N-[3-[3,6-bis(dimethylamino)xanthyl-9-yl]-4-carboxybenzoyl]-L-α-aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-S-[2-[3(or 4)-carboxy-4(or 3)-(2,3,6,7,12,13,16,17-octahydro-1H,5H,11H,15H-xantheno[2,3,4-ij:5,6,7-i'j']diquinolizin-18-ium-9-yl)phenyl]amino]-2-oxoethyl]-, bis(inner salt) (9CI) (CA INDEX NAME)

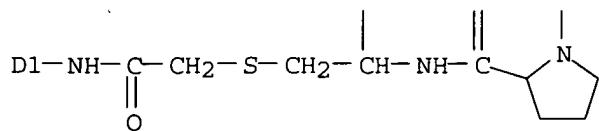
PAGE 1-A



PAGE 2-A



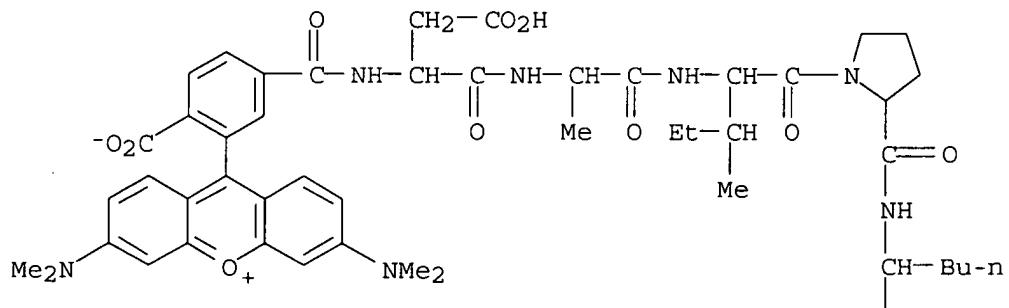
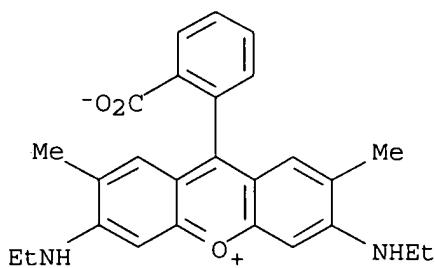
PAGE 3-A



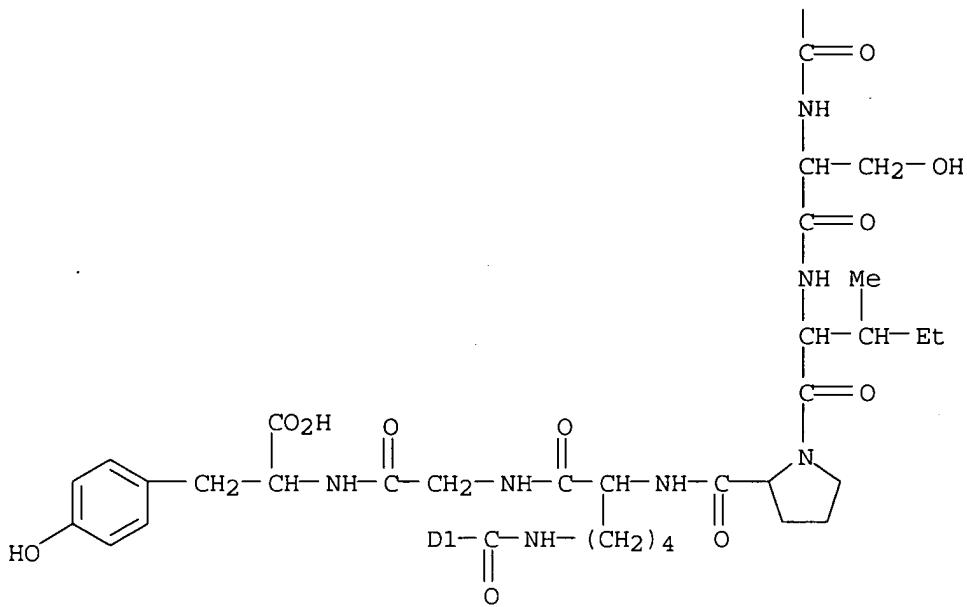
RN 691868-33-4 CAPLUS

CN L-Tyrosine, N-[3-[3,6-bis(dimethylamino)xanthylium-9-yl]-4-carboxybenzoyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-proyl-L-norleucyl-L-seryl-L-isoleucyl-L-proyl-N6-[3(or 4)-[3,6-bis(ethylamino)-2,7-dimethylxanthylium-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



RN 691868-34-5 CAPLUS

CN L-Tyrosine, N-[3(or 4)-[3,6-bis(ethylamino)-2,7-dimethylxanthylium-9-yl]-4(or 3)-carboxybenzoyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-proyl-L-norleucyl-L-seryl-L-isoleucyl-L-proyl-N6-[3(or 4)-[3,6-bis(ethylamino)-2,7-dimethylxanthylium-9-yl]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

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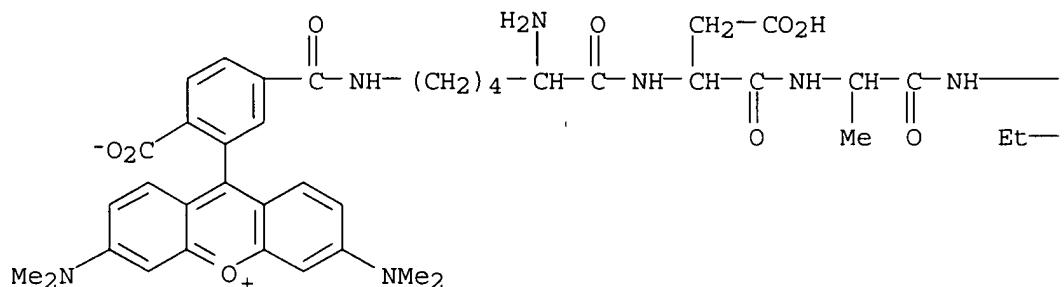
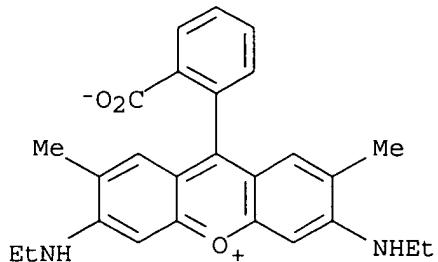
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

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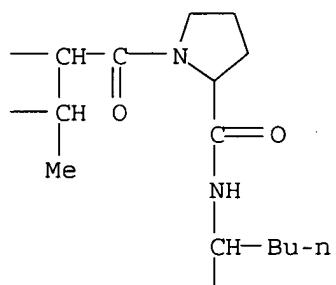
RN 691868-35-6 CAPLUS

CN L-Tyrosine, N6-[3-[3,6-bis(dimethylamino)xanthyl]imino]-4-carboxybenzoyl-L-lysyl-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[3(or 4)-[3,6-bis(ethylamino)-2,7-dimethylxanthyl]imino]-4(or 3)-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

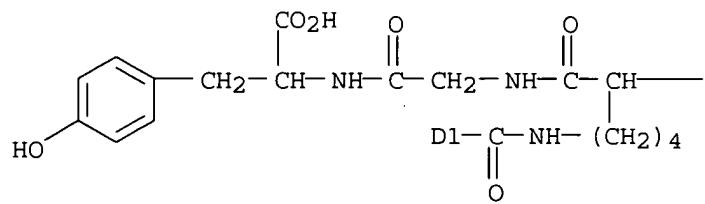
PAGE 1-A

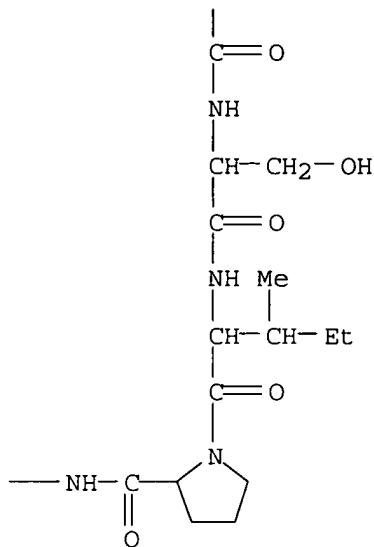


PAGE 1-B



PAGE 2-A





AB The present invention provides for novel reagents whose fluorescence increases in the presence of particular proteases. The reagents comprise a characteristically folded peptide backbone conjugated to two fluorophores such that the fluorophores are located opposite sides of a cleavage site. When the folded peptide is cleaved, as by digestion with a protease, the fluorophores provide a high intensity fluorescent signal at a visible wavelength. Because of their high specificity and their high fluorescence signal in the visible wavelengths, these protease indicators are particularly well suited for detection of protease activity in biological samples, in particular in frozen tissue sections. In one example, the protease indicator having the formula F1-Asp-Ala-Ile-Pro-Nle-Ser-Ile-Pro-Cys-F2, where F1 is a donor fluorophore (5-carboxytetramethylrhodamine) linked to aspartic acid via the α -amino group and F2 is an acceptor fluorophore (rhodamine X acetamide (R492)) linked via the sulfhydryl group of the cysteine, exhibits changes in emission spectrum after addn of an elastase protease. Thus this invention also provides for methods of detecting protease activity in situ in frozen sections.

L11 ANSWER 13 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:162567 CAPLUS
 DOCUMENT NUMBER: 140:212973
 TITLE: Fluorescence polarization assay for screening prostaglandin synthase inhibitors
 INVENTOR(S): Ma, Y. Henry; Li, Zhuyin; Xiong, Junjie; Sabol, Jeffrey S.
 PATENT ASSIGNEE(S): Aventis Pharmaceuticals Inc., USA; Hu, Linghong
 SOURCE: PCT Int. Appl., 38 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

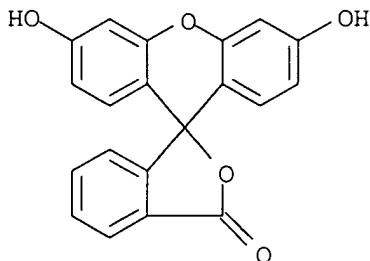
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2004016223	A3	20041021		
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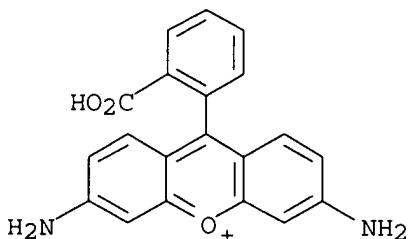
IT 2321-07-5, Fluorescein 13558-31-1

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(fluorescence polarization assay for screening prostaglandin synthase
inhibitors)

RN 2321-07-5 CAPLUS

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy- (9CI)
(CA INDEX NAME)

RN 13558-31-1 CAPLUS

CN Xanthylum, 3,6-diamino-9-(2-carboxyphenyl)-, chloride (9CI) (CA INDEX
NAME)● Cl⁻

AB Provided herein is a novel and useful **method** for evaluating the ability of compds. or agents to decrease the activity of microsomal prostaglandin E synthase (mPGES) or hematopoietic prostaglandin D synthase

(hPGDS) to produce their resp. prostaglandin products. Such a **method** of the present invention comprises the steps of mixing the prostaglandin synthase with its **substrate**, a cofactor and the compound or agent so that the enzymic reaction can occur. The mixture is then incubated with a stop solution comprising an agent that prevents the spontaneous conversion of unreacted **substrate** into the prostaglandin product. This mixture is then incubated with a detection reagent that comprises the prostaglandin product **labeled** with a fluorescent **label** (i.e. a tracer), and an antibody having the prostaglandin product as an immunogen. Subsequently, the mixture and a control mixture that has been treated in the identical fashion, but lacks the compound or agent, are illuminated with plane polarized light having a wavelength at which the fluorescent **label** fluoresces. The fluorescence polarization of the mixture and the control mixture are measured and compared. A mixture having a polarization measurement greater than the polarization measurement of the control mixture indicates that the compound or agent decreased the activity of the prostaglandin synthase. The present invention is based upon the discovery that surprisingly and unexpectedly, fluorescence polarization can be used to identify compds. or agents that decrease the activity of a prostaglandin synthase, e.g., mPGES or hPGDS, to produce a prostaglandin, e.g., PGD2 or PGE2. An assay has been developed to measure the conversion of PGH2 to PGE2 by inducible microsomal PGE2 synthase. The assay is configured based on the Fluorescence Polarization principle. The enzyme is incubated with PGH2, glutathione, and the compound or agent being evaluated. After a short incubation period (at least 30 s), a stop solution containing FeCl₂ and citric acid is added to quench any remaining PGH2, which would otherwise undergo spontaneous conversion to PGD2 or PGE2, and thus interfere with the quantification of the enzymic conversion of PGH2 to PGE2. A detection solution containing a fluorescence **labeled** (Texas Red) tracer (PGE2) and anti-PGE2 antibody is then added in order to generate the specific signal that is inversely proportional to the production of PGE2. The PGE2 generated from the enzymic reaction will compete specifically for the antibody and release the fluorescence **labeled** tracer. Inhibition of PGE2 synthase activity will result in increased FP value. The assay described above was validated with a known inhibitor of mPGES. A fluorescence polarization (FP) assay to measure hPGDS activity has also been developed. The assay described above was validated using HQL 79, a known inhibitor of hPGDS.

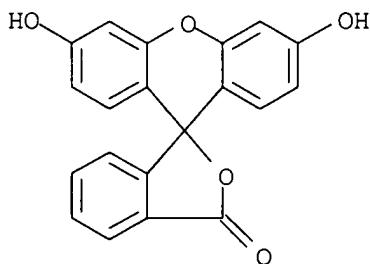
L11 ANSWER 15 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:874871 CAPLUS
 DOCUMENT NUMBER: 139:360902
 TITLE: Homo-doubly fluorophore-**labeled** peptides for the detection of enzyme activity in biological samples
 INVENTOR(S): Packard, Beverly; Komoriya, Akira
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 42 pp., Cont.-in-part of Appl. No. PCT/US00/24882.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 5
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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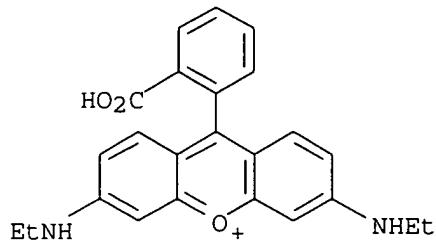
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US 2000-747287 A 20001222				
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 6-Carboxytetramethylrhodamine 212207-37-9 212207-40-4
 212268-88-7 212268-91-2 212268-96-7
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (homo-doubly fluorophore-labeled peptides for the detection
 of enzyme activity in biol. samples)

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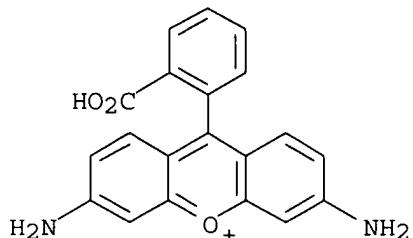


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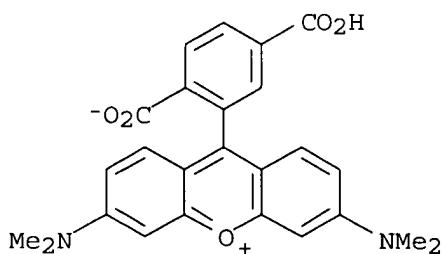
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● Cl⁻

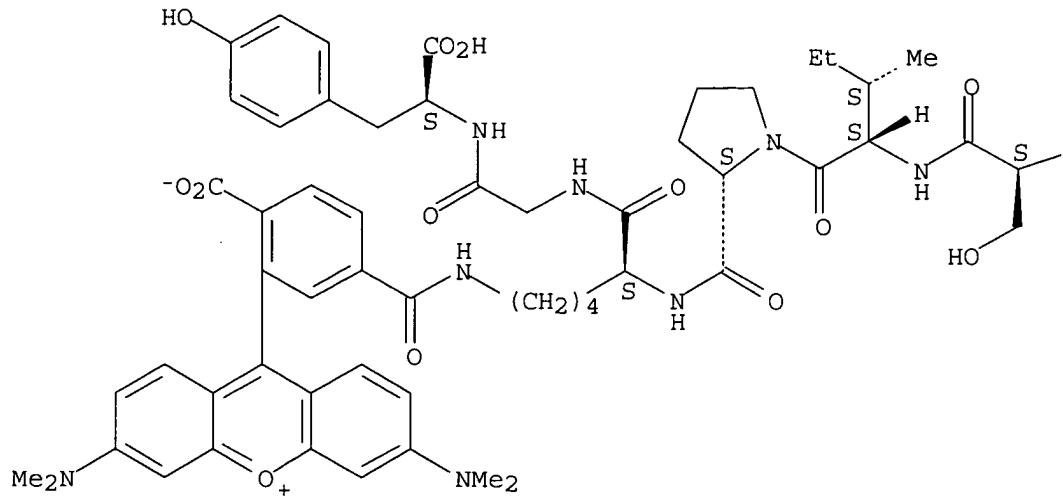
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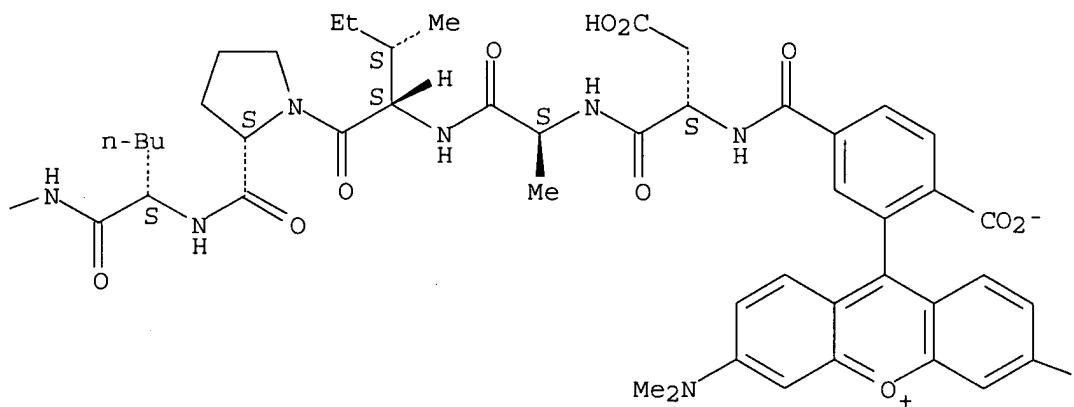
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Absolute stereochemistry.

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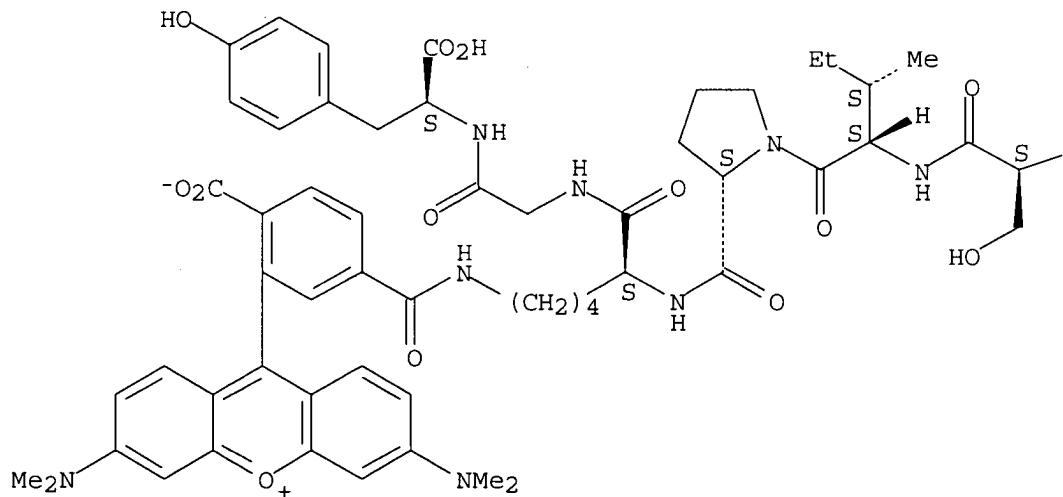
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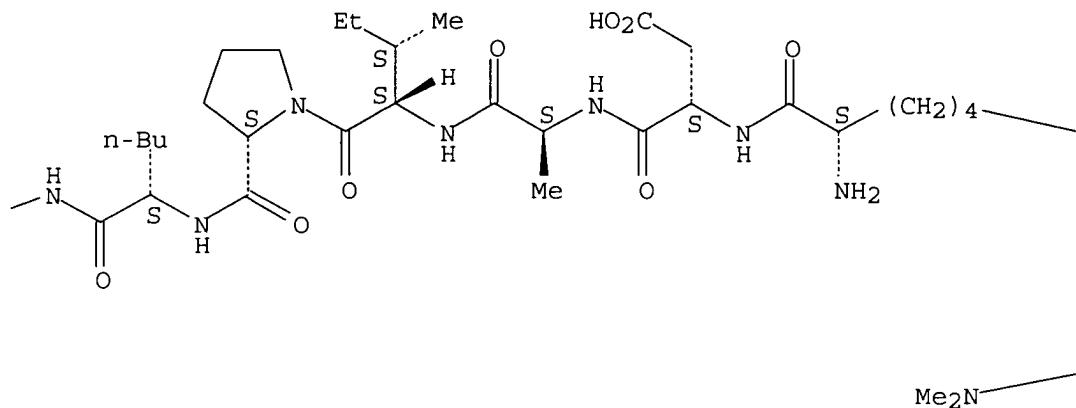
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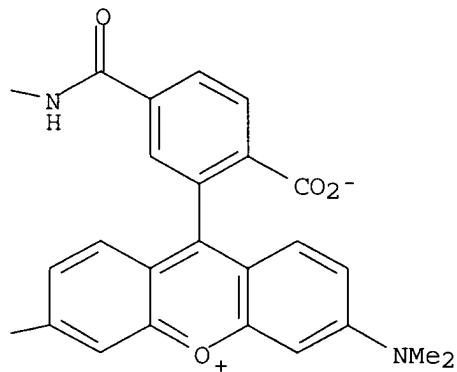
Absolute stereochemistry.



PAGE 1-B

Me₂N

PAGE 1-C

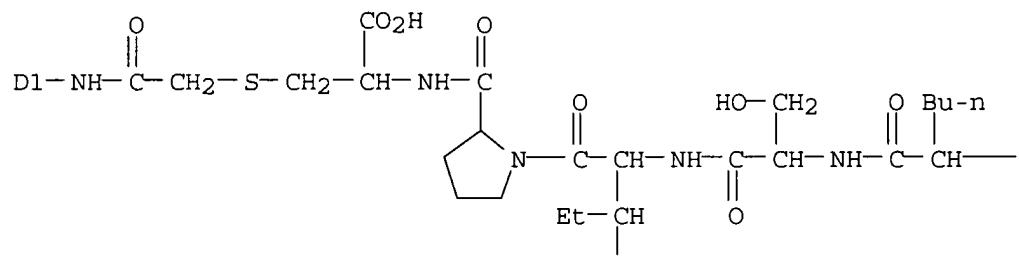
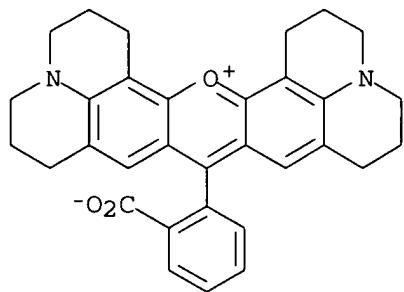


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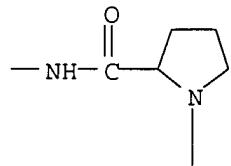
CN L-Cysteine, N-[4-[3,6-bis(dimethylamino)xanthyl] -3-carboxybenzoyl] -L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-S-[2-[[3(or 4)-carboxy-4(or 3)-(2,3,6,7,12,13,16,17-octahydro-1H,5H,11H,15H-xantheno[2,3-ij:5,6,7-i'j']diquinolizin-18-ium-9-yl)phenyl]amino]-2-oxoethyl] -, bis(inner salt) (9CI) (CA INDEX NAME)

10/716,165

PAGE 1-A



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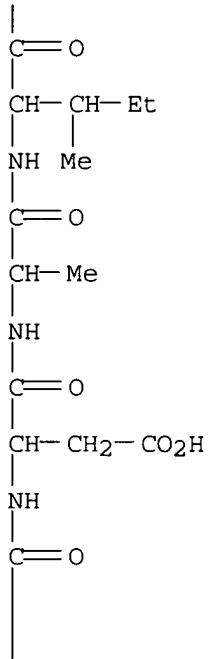


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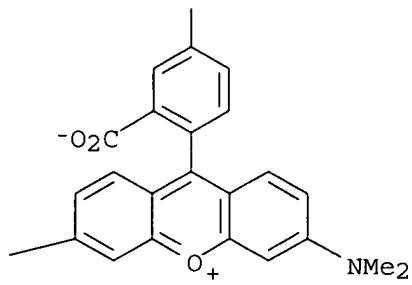
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PAGE 3-A

Me₂N—

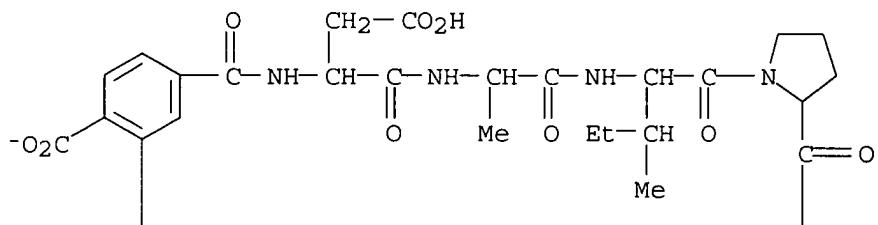
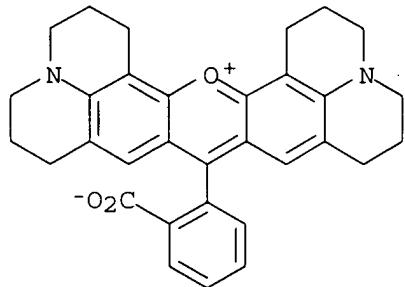
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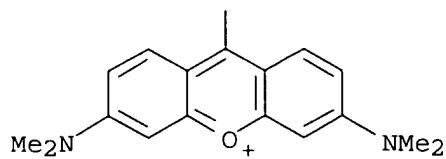


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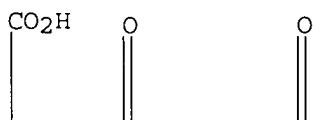
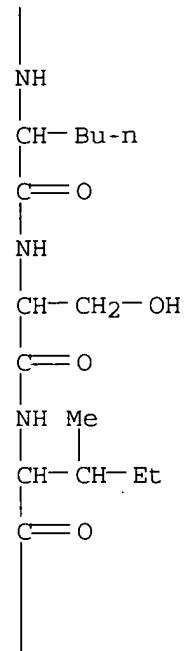
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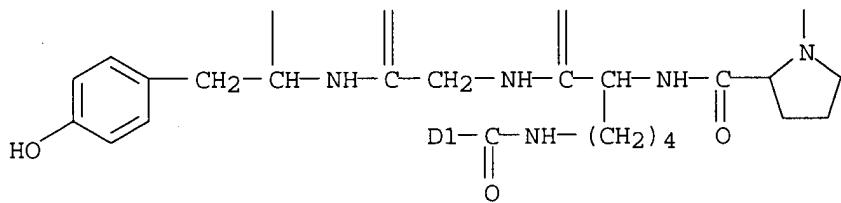




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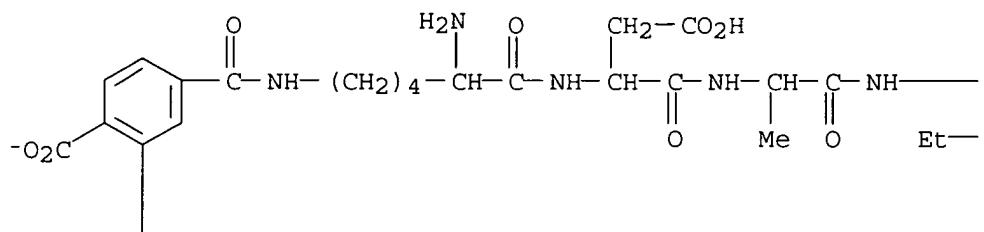
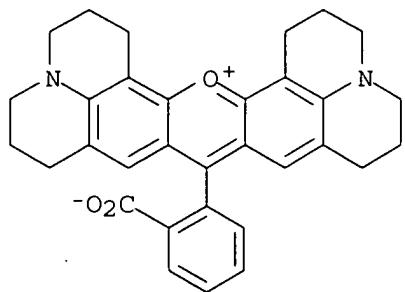
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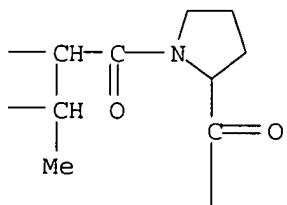
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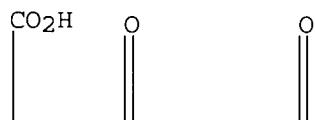
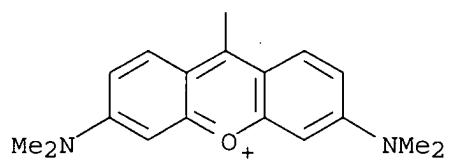


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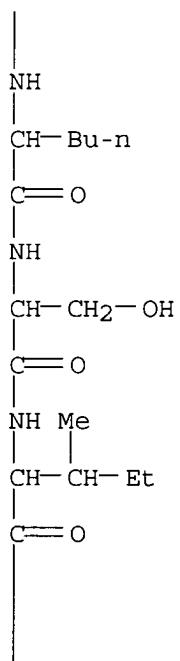


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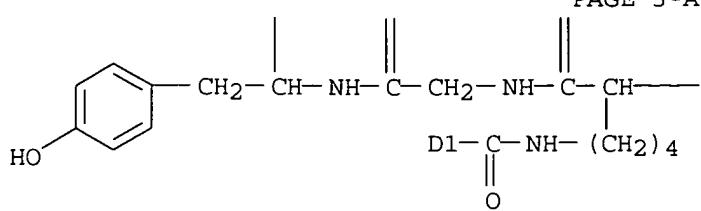
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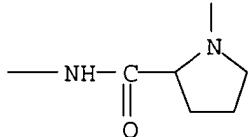
PAGE 2-B



PAGE 3-A



PAGE 3-B



AB The present invention provides for novel reagents whose fluorescence changes upon cleavage or a change in conformation of a backbone. The reagents comprise a backbone (e.g. nucleic acid, polypeptide, etc.) joining two fluorophores of the same species whereby the fluorophores form an H-dimer resulting in quenching of the fluorescence of the fluorophores. One such fluorophore-labeled peptide comprises DAIP(Nle)SIPKGY, where the fluorophore is linked to the N-terminus via the α -amino group of aspartic acid and to the ϵ -amino group of lysine by the displacement of a succinimidyl group linked to 6-carboxytetramethylrhodamine (6-TMR) or 5/6-carboxy-X-rhodamine. When the backbone is cleaved or changes conformation, the fluorophores are separated, no longer forming an H-type dimer, and are de-quenched thereby providing a detectable signal. The use of a single fluorophore rather than an "acceptor-donor" fluorescence resonance energy transfer system offers synthesis and performance advantages. An addnl. discovery of this invention is that attachment of a hydrophobic protecting group to a polypeptide enhances uptake of that polypeptide by a cell. A new class of profluorescent protease substrate was designed and synthesized with spectral properties that fit the exciton model.

L11 ANSWER 17 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:551540 CAPLUS

DOCUMENT NUMBER: 139:97271

TITLE: Fluorogenic protease substrates

INVENTOR(S): Blackman, Michael John; Corrie, John Edgar Thomas; Eccleston, John Frederick

PATENT ASSIGNEE(S): Medical Research Council, UK

SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003057723	A2	20030717	WO 2003-GB45	20030109

WO 2003057723 A3 20030904
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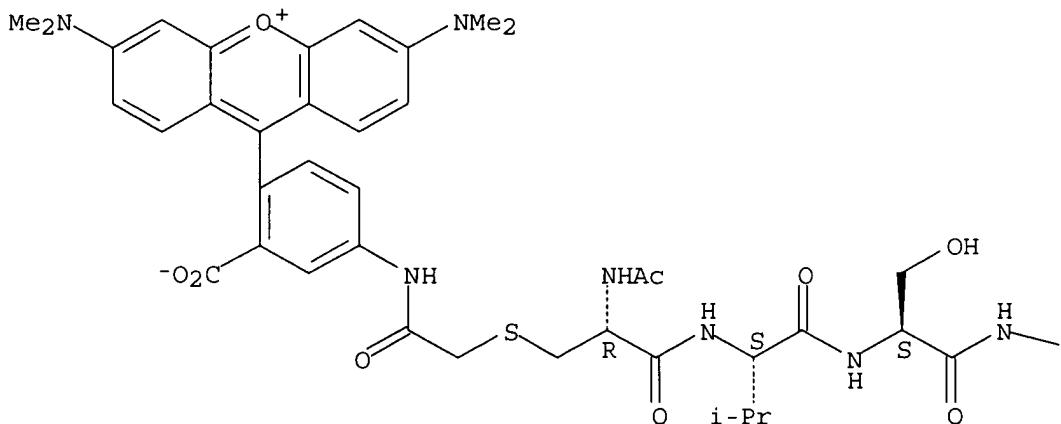
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 (Analytical study); PREP (Preparation); USES (Uses)
 (fluorogenic protease substrates)

RN 557111-63-4 CAPLUS

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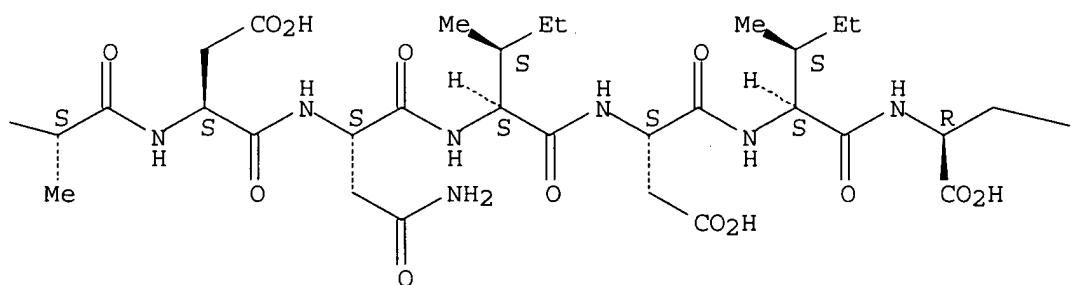
Absolute stereochemistry.

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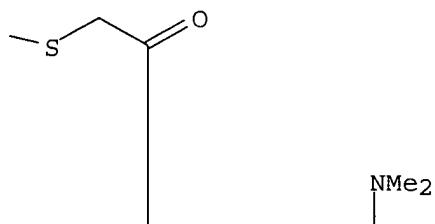


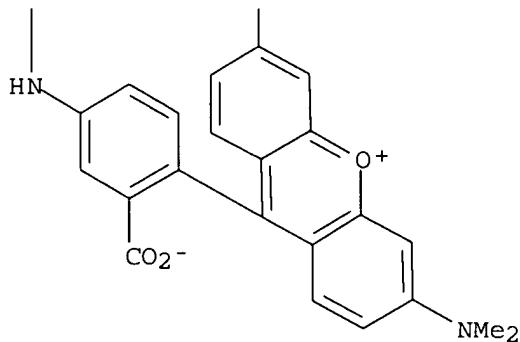
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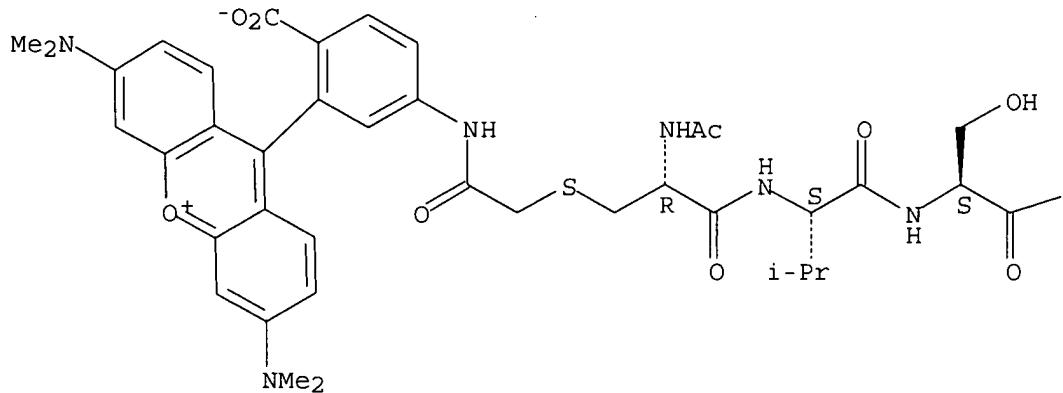


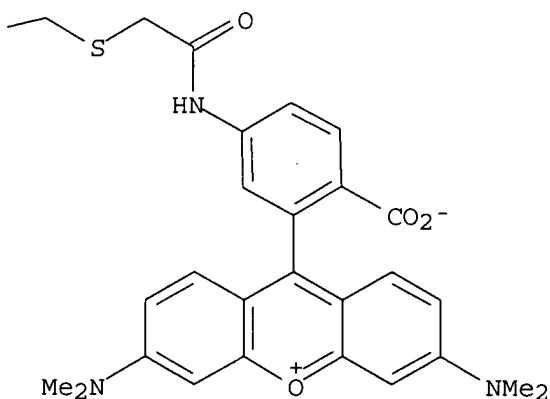
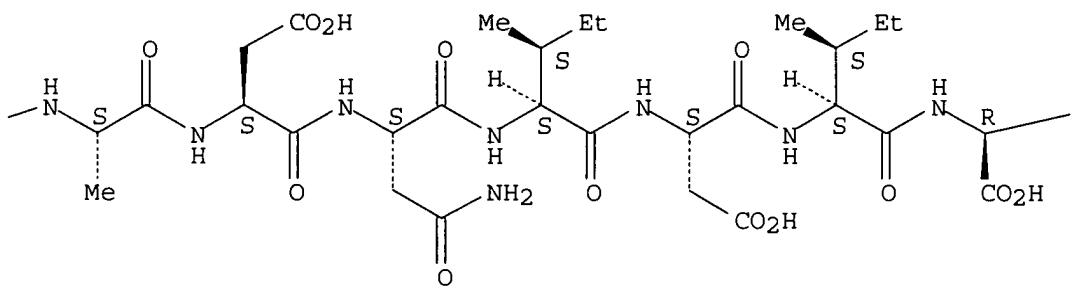


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Absolute stereochemistry.



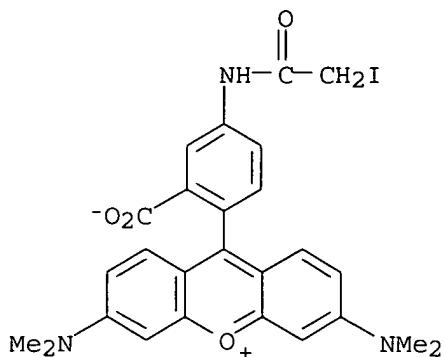


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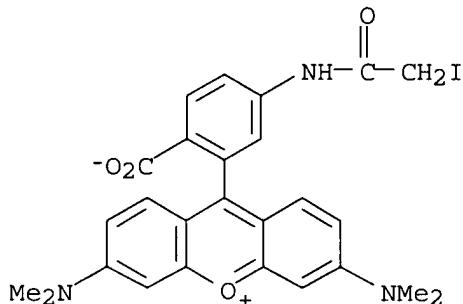
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(fluorogenic protease substrates)

RN 114458-99-0 CAPLUS

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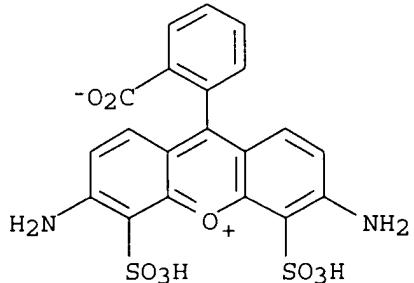
RN 143756-47-2 CAPLUS
 CN Xanthylium, 9-[2-carboxy-5-[(iodoacetyl)amino]phenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)



AB Fluorogenic protease **substrates** are provided that comprise a peptide doubly **labeled** via thiol groups of the peptide with an alkyleneamidotetramethylrhodamine (alkyleneamido-TMR) group. Preferred **substrates** are doubly **labeled** with substantially pure 5-methyleneamido-TMR or 6-methyleneamido-TMR. **Methods** of **preparing** the **substrates** are provided, which comprise reacting the unlabeled peptide with haloalkylamido-TMR (preferably iodoacetamido-TMR). More generally, fluorogenic protease **substrates** are also provided which comprise a peptide doubly labeled with the same rhodamine derivative, where the two labels, and their linkages to the peptide, are substantially isomerically identical. Also provided are related **methods** for assaying protease activity in a sample, kits for use in such **methods**, and solid supports bearing the **substrates** of the invention. Thus, Ac-CVSADNIDIC-OH alkylated at both Cys side chains with 5- or 6-idoacetamidotetramethylrhodamine was **prepared**. Cleavage of this peptide by Plasmodium falciparum subtilisin-like protease resulted in increased fluorescence.

L11 ANSWER 19 OF 58 CAPLUS COPYRIGHT 2005 ACS on STM
 ACCESSION NUMBER: 2003:448654 CAPLUS
 DOCUMENT NUMBER: 139:157332
 TITLE: Light Activated Patterning of Dye-**Labeled**
 Molecules on Surfaces

AUTHOR(S): Holden, Matthew A.; Cremer, Paul S.
 CORPORATE SOURCE: Department of Chemistry, Texas A&M University, College Station, TX, 77843, USA
 SOURCE: Journal of the American Chemical Society (2003), 125(27), 8074-8075
 CODEN: JACSAT; ISSN: 0002-7863
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 247144-99-6, Alexa 488
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)
 (streptavidin labeled with; patterning based on linking proteins or ligands or other organic/inorg. compds. to fluorophore that can be subsequently imagewise photobleached and bound to interface)
 RN 247144-99-6 CAPLUS
 CN Xanthylium, 3,6-diamino-9-[2,4(or 2,5)-dicarboxyphenyl]-4,5-disulfo-, inner salt, trilithium salt (9CI) (CA INDEX NAME)

D1-CO₂H

●3 Li

AB This Communication describes a novel method for patterning proteins, ligands, or other organic/inorg. species onto solid substrates. The process works by linking the moiety of interest to a fluorophore that can be subsequently photobleached and bound to the interface. The technique can be performed in aqueous solution and allows several species to be addressed onto the surface simultaneously by using different frequencies of light. Because the method can be used with fluorophores excited by visible light, shorter and more damaging wavelengths can be avoided. Electronic supplementary information (ESI) is available at <http://pubs.acs.org> and contains exptl. procedures for photopatterning/photobleaching process.

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 20 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:371283 CAPLUS
 DOCUMENT NUMBER: 139:225035
 TITLE: Incorporation of reporter molecule-labeled

nucleotides by DNA polymerases. II. High-density
labeling of natural DNA

AUTHOR(S) : Tasara, Taurai; Angerer, Bernhard; Damond, Martine;
 Winter, Holger; Doerhoefer, Sabine; Huebscher, Ulrich;
 Amacker, Mario

CORPORATE SOURCE: PSE-B, EPFL, Gnothis SA, Lausanne, CH-1015, Switz.

SOURCE: Nucleic Acids Research (2003), 31(10), 2636-2646

CODEN: NARHAD; ISSN: 0305-1048

PUBLISHER: Oxford University Press

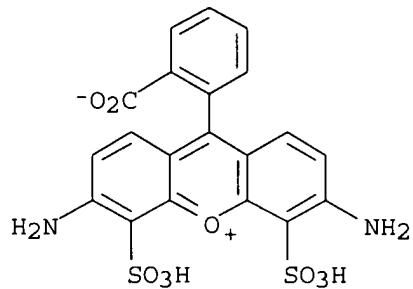
DOCUMENT TYPE: Journal

LANGUAGE: English

IT 247144-99-6D, Alexa 488, dNTP conjugates
 RL: BSU (Biological study, unclassified); BUU (Biological use,
 unclassified); BIOL (Biological study); USES (Uses)
 (evaluation of modified dNTP analogs for high-d. incorporation into
 DNA)

RN 247144-99-6 CAPLUS

CN Xanthylium, 3,6-diamino-9-[2,4(or 2,5)-dicarboxyphenyl]-4,5-disulfo-,
 inner salt, trilithium salt (9CI) (CA INDEX NAME)



D1— CO₂H

●3 Li

AB The modification of nucleic acids using nucleotides **linked** to detectable reporter or functional groups is an important exptl. tool in modern mol. biol. This enhances DNA or RNA detection as well as expanding the catalytic repertoire of nucleic acids. Here we present the evaluation of a broad range of modified deoxyribonucleoside 5'-triphosphates (dNTPs) covering all four naturally occurring nucleobases for potential use in DNA modification. A total of 30 modified dNTPs with either fluorescent or non-fluorescent reporter group attachments were systematically evaluated individually and in combinations for high-d. incorporation using different model and natural DNA templates. Furthermore, we show a side-by-side comparison of the incorporation efficiencies of a family A (Taq) and B (VentR exo-) type DNA polymerase using the differently modified dNTP **substrates**. Our results show superior performance by a family B-type DNA polymerase, VentR exo-, which is able to fully **synthesize** a 300 bp DNA product when all natural dNTPs are completely replaced by their biotin-**labeled** dNTP analogs. Moreover, we present systematic testing of various combinations of fluorescent dye-modified dNTPs enabling the simultaneous **labeling**

of DNA with up to four differently modified dNTPs.

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 21 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:371282 CAPLUS

DOCUMENT NUMBER: 139:214645

TITLE: Incorporation of reporter molecule-labeled nucleotides by DNA polymerases. I. Chemical synthesis of various reporter group-labeled 2'-deoxyribonucleoside-5'-triphosphates

AUTHOR(S): Giller, Gerald; Tasara, Taurai; Angerer, Bernhard; Muhlegger, Klaus; Amacker, Mario; Winter, Holger

CORPORATE SOURCE: PSE-B, EPFL, Gnothis SA, Lausanne, CH-1015, Switz.

SOURCE: Nucleic Acids Research (2003), 31(10), 2630-2635

CODEN: NARHAD; ISSN: 0305-1048

PUBLISHER: Oxford University Press

DOCUMENT TYPE: Journal

LANGUAGE: English

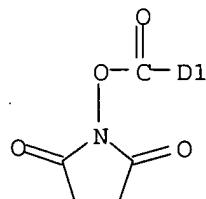
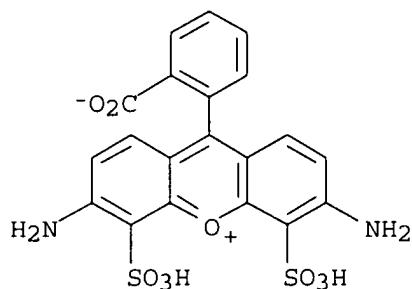
OTHER SOURCE(S): CASREACT 139:214645

IT 283176-30-7

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of reporter group-labeled
 2'-deoxyribonucleoside-5'-triphosphates for use as substrates
 for enzymic incorporation into DNA)

RN 283176-30-7 CAPLUS

CN Xanthylium, 3,6-diamino-9-[2-carboxy-4(or 5)-[[[(2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]phenyl]-4,5-disulfo-, inner salt (9CI) (CA INDEX NAME)

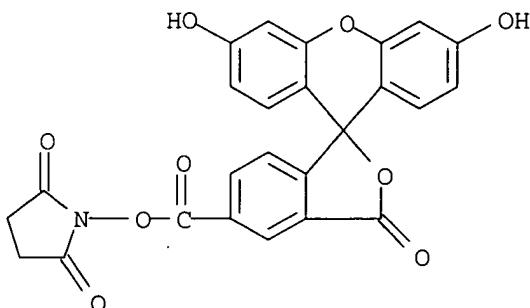


AB Fluorescent-labeled DNA is generated through enzymic incorporation of fluorophore-linked 2'-deoxyribonucleoside-5'-triphosphates (dNTPs) by DNA polymerases. We describe the synthesis of a variety of dye-labeled dNTPs. Amino-linker-modified 5'-triphosphates of all four naturally occurring

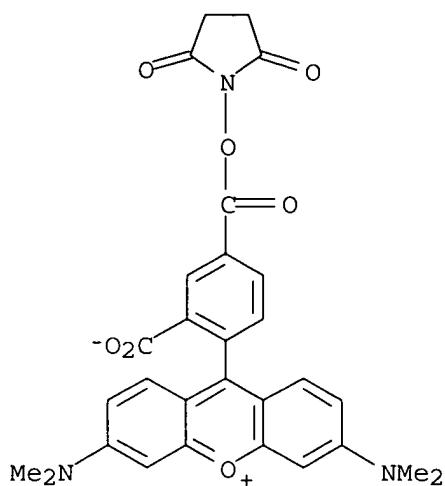
nucleobases were used as precursors. Com. available dyes were coupled to the amino function of the side chain. In addition, we attached novel fluorophore derivs. The **labeled** products were obtained in at least 96% purity after HPLC purification. Enzymic incorporation into DNA and subsequent extension of the modified DNA chain were studied. VentR exo-DNA polymerase and a defined template-primer system were used to analyze each dye-**labeled** dNTP derivative. Our data suggest that the incorporation efficiency depends on the selected dye, the nucleobase or a combination of both.

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 23 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:554920 CAPLUS
 DOCUMENT NUMBER: 137:305335
 TITLE: **Synthesis** and application of charge-modified dye-**labeled** dideoxynucleoside-5'-triphosphates to "direct-load" DNA sequencing
 AUTHOR(S): Finn, Patrick J.; Sun, Lei; Nampalli, Satyam; Xiao, Haiguang; Nelson, John R.; Mamone, J. Anthony; Grossmann, Greg; Flick, Parke K.; Fuller, Carl W.; Kumar, Shiv
 CORPORATE SOURCE: Amersham Biosciences, Piscataway, NJ, 08855-1327, USA
 SOURCE: Nucleic Acids Research (2002), 30(13), 2877-2885
 CODEN: NARHAD; ISSN: 0305-1048
 PUBLISHER: Oxford University Press
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 92557-80-7 150810-68-7
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (**synthesis** and application of charge-modified dye-**labeled** ddNTPs to "direct-load" DNA sequencing)
 RN 92557-80-7 CAPLUS
 CN 2,5-Pyrrolidinedione, 1-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]oxy]- (9CI) (CA INDEX NAME)



RN 150810-68-7 CAPLUS
 CN Xanthylium, 9-[2-carboxy-4-[[[(2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)



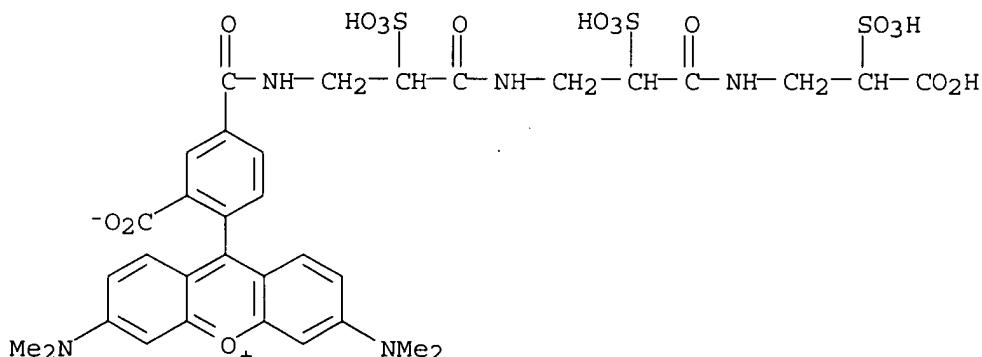
IT 470665-00-0P 470665-06-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and application of charge-modified dye-labeled ddNTPs to "direct-load" DNA sequencing)

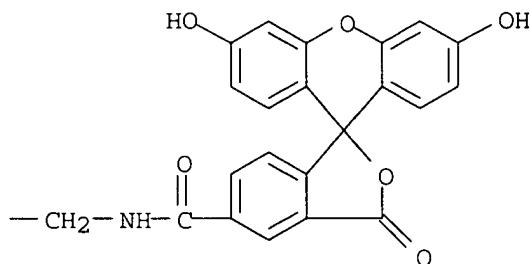
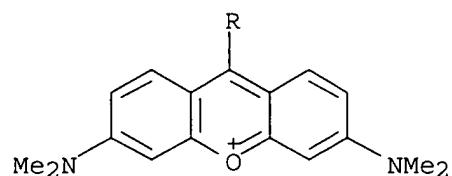
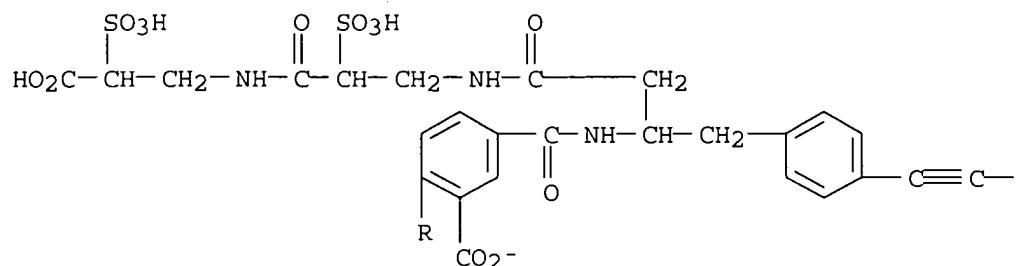
RN 470665-00-0 CAPLUS

CN Xanthylium, 9-[2-carboxy-4-[[3-[[(2-carboxy-2-sulfoethyl)amino]-3-oxo-2-sulfopropyl]amino]-3-oxo-2-sulfopropyl]amino]carbonylphenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)



RN 470665-06-6 CAPLUS

CN Beta-Alanine, N-[3-[[4-[3,6-bis(dimethylamino)xanthylium-9-yl]-3-carboxybenzoyl]amino]-4-[4-[3-[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-(9H)xanthen]-5-yl)carbonyl]amino]-1-propynyl]phenyl]-1-oxobutyl]-2-sulfo-beta-alanyl-2-sulfo-, inner salt (9CI) (CA INDEX NAME)



AB A novel series of charge-modified, dye-**labeled** 2',3'-dideoxynucleoside-triphosphate terminators were **synthesized** and evaluated as reagents for DNA sequencing. These terminators possess an advantage over existing reagents in that no purification is required to remove unreacted nucleotide or associated breakdown products prior to electrophoretic separation of the sequencing fragments. This obviates the need for a time consuming post-reaction work up, allowing direct loading of DNA sequencing reaction mixts. onto a slab gel. Thermo Sequenase II DNA polymerase poorly incorporates the charge-modified terminators compared with regular dye-**labeled** terminators. However, extending the **linker** arm between dye and nucleotide and using a mutant form of a related DNA polymerase can in part mitigate the decrease in **substrate** efficiency. We also present evidence that these charge-modified terminators can relieve gel compression artifacts when used with dGTP in sequencing reactions.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/716,165

ACCESSION NUMBER: 2002:353665 CAPLUS
DOCUMENT NUMBER: 136:371071
TITLE: Atropisomers of asymmetric xanthene fluorescent dyes
and use in DNA sequencing and fragment analysis
INVENTOR(S): Lee, Linda G.; Taing, Meng C.; Rosemblum, Barnett B.
PATENT ASSIGNEE(S): PE Corporation, USA
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002036832	A2	20020510	WO 2001-US48654	20011030
WO 2002036832	A3	20020801		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 6448407	B1	20020910	US 2000-704966	20001101
CA 2426121	AA	20020510	CA 2001-2426121	20011030
AU 2002030914	A5	20020515	AU 2002-30914	20011030
EP 1330550	A2	20030730	EP 2001-991171	20011030
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004532805	T2	20041028	JP 2002-539575	20011030
US 2003055243	A1	20030320	US 2002-227058	20020821
US 6649769	B2	20031118		
US 2004229235	A1	20041118	US 2003-716165	20031118
PRIORITY APPLN. INFO.:			US 2000-704966	A 20001101
			WO 2001-US48654	W 20011030
			US 2002-227058	A3 20020821

OTHER SOURCE(S): MARPAT 136:371071

IT 423763-65-9P

RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(atropisomers of asym. xanthene fluorescent dyes and use in DNA sequencing and fragment anal.)

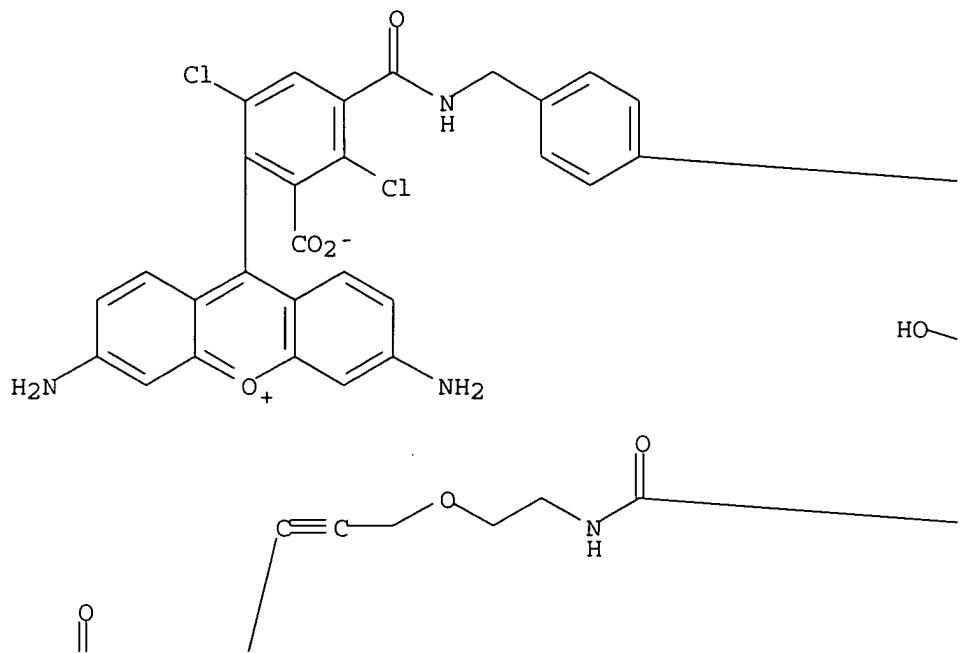
RN 423763-65-9 CAPLUS

CN Xanthylium, 3,6-diamino-9-[4-[[[[4-[[[[1S]-6-[[[2-[[3-[2-amino-4,7-dihydro-4-oxo-7-[(2R,5S)-tetrahydro-5-(3,5,7,7-tetrahydroxy-3,5,7-trioxido-2,4,6-trioxa-3,5,7-triphosphohept-1-yl)-2-furanyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-propynyl]oxy]ethyl]amino]carbonyl]-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-(y1)methyl]amino]carbonyl]phenyl]methyl]amino]carbonyl]-2-carboxy-3,6-dichlorophenyl]-, inner salt (9CI) (CA INDEX NAME)

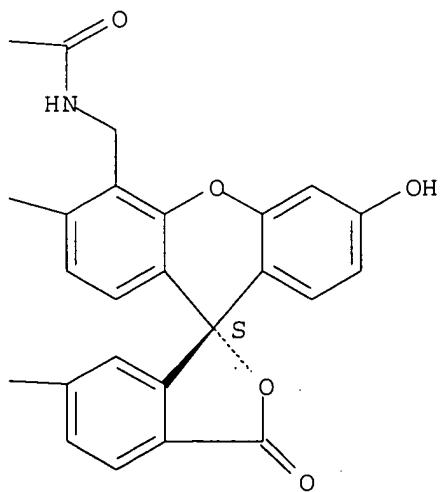
Absolute stereochemistry.

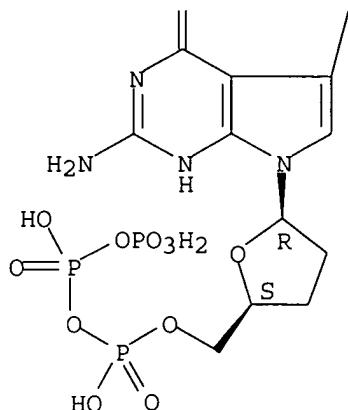
10/716,165

PAGE 1-A



PAGE 1-B





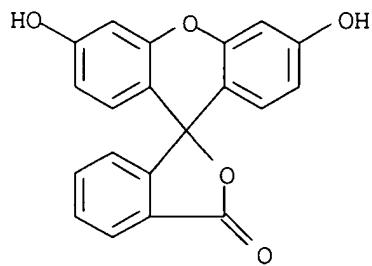
AB Substantially pure atropisomers of xanthene compds., and use in variety of mol. biol. applications, are disclosed. Use of atropisomeric xanthene fluorescent dyes as **labels** for **substrates** such as nucleotides, nucleosides, polynucleotides, polypeptides and carbohydrates, is claimed. Applications include DNA sequencing, DNA fragment anal., PCR, SNP anal., oligonucleotide ligation, amplification, minisequencing, and primer extension. **Synthesis** of those compds. are described. Sequencing of pGEM with phosphate-linker, energy-transfer terminator ddATP, and ddGTP is described.

L11 ANSWER 26 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:228135 CAPLUS
 DOCUMENT NUMBER: 136:263388
 TITLE: Nucleic acid **synthesis** using new 5-substituted deoxyuridine derivatives by PCR with superthermophilic DNA polymerase
 INVENTOR(S): Sawai, Hiroaki; Ozaki, Akiko; Masud, Mohammad M.; Sato, Fumie; Ozaki, Hiroaki
 PATENT ASSIGNEE(S): Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2002085079	A2	20020326	JP 2000-282430	20000918
PRIORITY APPLN. INFO.:			JP 2000-282430	20000918

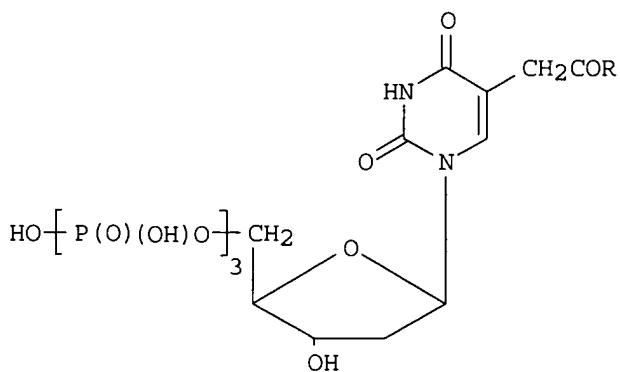
OTHER SOURCE(S): MARPAT 136:263388
 IT 27072-45-3, Fluorescein isothiocyanate
 RL: ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical study);
 RACT (Reactant or reagent); USES (Uses)
 (**labeling** of modified DNA with; nucleic acid
synthesis using new 5-substituted deoxyuridine derivs. by PCR
 with superthermophilic DNA polymerase)

RN 27072-45-3 CAPLUS
 CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy-5(or 6)-isothiocyanato- (9CI) (CA INDEX NAME)



D1—N≡C≡S

GI



AB A **method** of nucleic acid **synthesis** using new 5-substituted deoxyuridine derivs. I (R = OX or NHY, X = H, alkyl, alkenyl, alkynyl, or aryl, Y = H, alkyl, alkenyl, alkynyl, aryl, (CH₂)_n, or NHZ, (CH₂)₂N[(CH₂)₂NHZ]₂, Z = H, COCF₃, COCH₃, carboxy Me imidazole, histidyl, aspargil, or glutamyl, n = 2, 3, 4, or 6) as **substrates** by PCR with superthermophilic DNA polymerase, is disclosed. The **method** is based on the discovery that certain DNA polymerases, KOD Dash DNA polymerase or KOD DNA polymerase, in particular, can use those 5-substituted deoxyuridine derivs., obtained by the reaction of arabino amino-oxazoline and α -bromomethyl fumarate, as **substrates**, unlike other DNA polymerases. KOD Dash DNA polymerase can accept triphosphates of new deoxyuridine derivs. bearing a C5'-substituent group via an α -methylene **linker** as a **substrate** in the polymerase chain reaction (PCR) yielding the corresponding functionalized DNA effectively, while other conventional DNA polymerases cannot tolerate the modification of the **substrate**. Novel thymidine analog triphosphates, which have an sp³-hybridized carbon at the C5 α -position with amino- **linker** arms, a Me ester, or a carboxyl group at the C5 sidearm, were good **substrates** for primer-extension reactions by DNA polymerase from *Pyrococcus kodakaraensis* (KOD Dash DNA polymerase), yielding exclusively full-length products. The

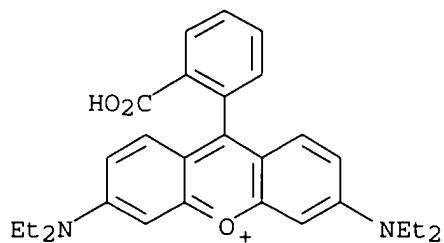
resulting modified DNA was further allowed to react with a functional mol. such as fluorescein isothiocyanate. By contrast, only truncated products were formed from the thymidine analog **substrate** bearing the amino-linker arm or the neg. charged carboxyl group using Taq, Tth DNA polymerase, or DNA polymerase I from E. coli (Klenow fragment). The results indicate either that the thymidine analog was not accepted by the enzymes, or that the polymerases could not extend the products, once the analog had been incorporated, depending on the type of the analog. A conventional thymidine analog bearing an aminopropenyl group at the C5-position was accepted by all enzymes, among which KOD Dash DNA polymerase showed the highest activity for the polymerization with this analog. Templates bearing the thymidine analogs in place of one thymidine residue were read by KOD Dash, Taq, Tth DNA polymerases, and the Klenow fragment giving the full-length product. KOD Dash DNA polymerase could expand structural diversities of **substrates** that can be used to prepare modified DNAs.

L11 ANSWER 27 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:90564 CAPLUS
 DOCUMENT NUMBER: 136:131228
 TITLE: **Method** of screening for specific binding interactions
 INVENTOR(S): Strittmatter, Warren J.
 PATENT ASSIGNEE(S): Duke University, USA
 SOURCE: U.S. Pat. Appl. Publ., 10 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002012951	A1	20020131	US 1997-953323	19971017
US 6348322	B2	20020219		
US 2002142335	A1	20021003	US 2002-60639	20020130
PRIORITY APPLN. INFO.:			US 1997-953323	A1 19971017

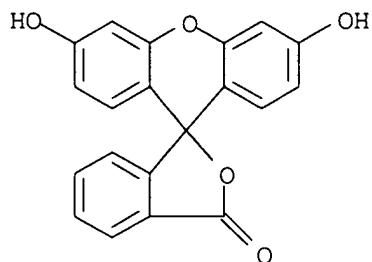
IT 81-88-9D, conjugates with dextran
 RL: ARG (Analytical reagent use); DEV (Device component use); ANST (Analytical study); USES (Uses)
 (deposited with human or rat IgG into wells of microtiter plate;
method of screening for specific binding interactions)

RN 81-88-9 CAPLUS
 CN Xanthylium, 9-(2-carboxyphenyl)-3,6-bis(diethylamino)-, chloride (9CI)
 (CA INDEX NAME)



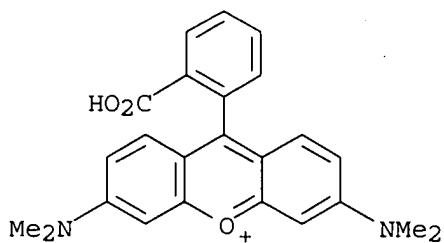
● Cl⁻

IT 27072-45-3D, FITC, conjugates with anti-human IgG
70281-37-7D, Tetramethylrhodamine, conjugates with antibody
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(method of screening for specific binding interactions)
RN 27072-45-3 CAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy-5(or
6)-isothiocyanato- (9CI) (CA INDEX NAME)



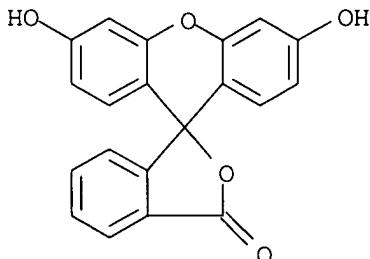
D1-N≡C=S

RN 70281-37-7 CAPLUS
CN Xanthylum, 9-(2-carboxyphenyl)-3,6-bis(dimethylamino)-, chloride (9CI)
(CA INDEX NAME)



● Cl⁻

IT 2321-07-5D, Fluorescein, conjugates with dextran
RL: ARG (Analytical reagent use); DEV (Device component use); ANST
(Analytical study); USES (Uses)
(peptide fragments of laminin deposition in wells of microtiter plate
along with; **method** of screening for specific binding
interactions)
RN 2321-07-5 CAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one, 3',6'-dihydroxy- (9CI)
(CA INDEX NAME)



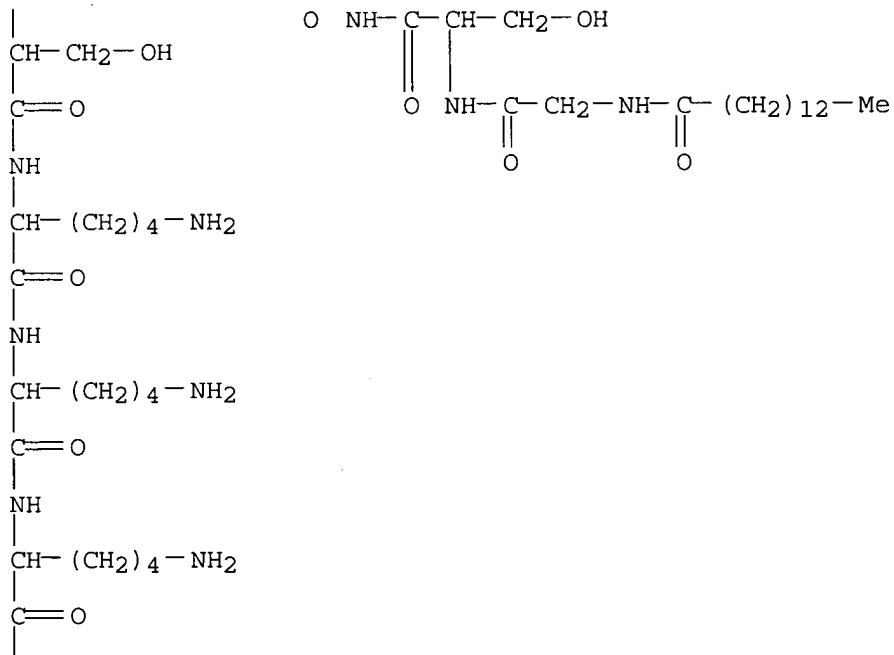
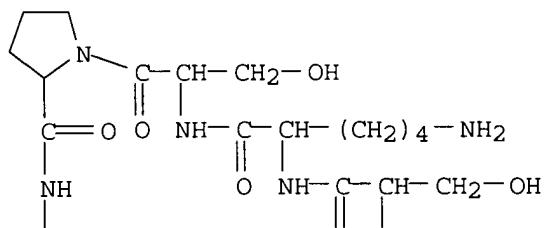
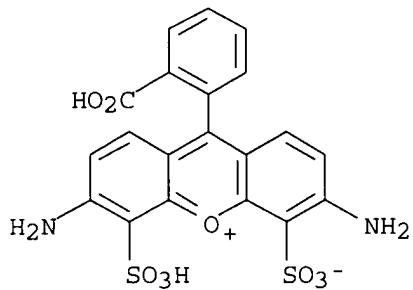
AB A **method** for detecting the binding of a test compound to a probe mol. comprises providing a test compound, the test compound having a first fluorophore bound thereto, and providing a screening **substrate**. The screening **substrate** comprises a solid support, a probe mol. bound to the solid support, and a second fluorophore bound to the solid support adjacent the probe mol. An advantage of the invention is that this obviates the need for binding the second fluorophore directly to the probe mol. Preferably, the second fluorophore is bound to the solid support by a flexible **linker** group. This enables the second fluorophore to interrogate different positions on the probe mol., which is also bound to the solid support adjacent the **linker** group, enhancing the ability of the **method** of the invention to detect pos. binding events (specific binding of the test compound to the probe mol.). The first and second fluorophores together comprise the donor and acceptor fluorophores of a fluorescence resonance energy transfer (FRET) pair, or a "donor/acceptor pair.". The test compound is contacted to the screening **substrate**, and the screening **substrate** illuminated with light at a wavelength that is absorbed by the donor fluorophore. The transfer of energy from one to the other fluorophore is then detected, with the transfer of energy indicating the binding of the test compound to the probe. **Substrates** useful for carrying out the foregoing **methods** are also disclosed.

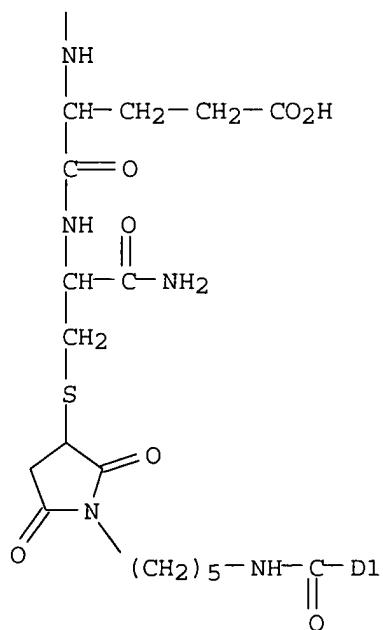
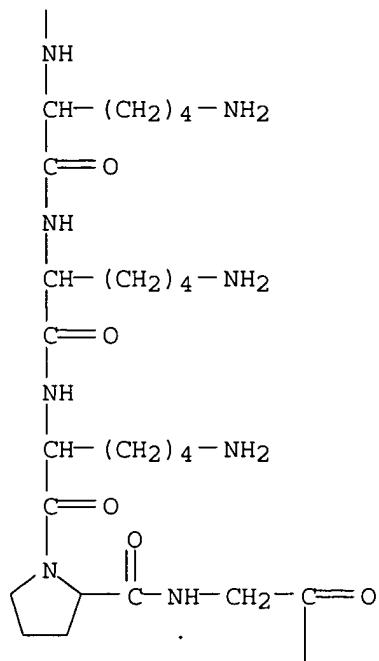
L11 ANSWER 28 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:51638 CAPLUS
DOCUMENT NUMBER: 136:101105
TITLE: Membrane binding peptides of CD59 and DAF derivatives
in targeting lipid rafts of cell membranes for
treatment of inflammatory and immune disorders
INVENTOR(S): Rowling, Pamela Jane Elizabeth; Smith, Geoffrey Paul;
Ridley, Simon Hugh
PATENT ASSIGNEE(S): Adprotech Limited, UK
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

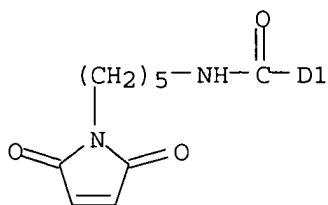
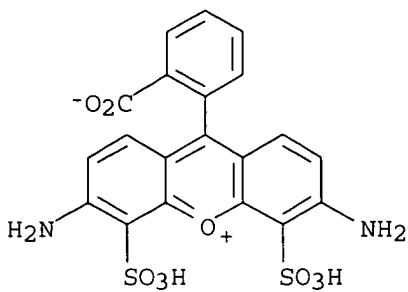
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002004638	A1	20020117	WO 2001-GB3034	20010706
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2415478	AA	20020117	CA 2001-2415478	20010706
EP 1299537	A1	20030409	EP 2001-947636	20010706
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2004043432	A1	20040304	US 2003-332047	20030402
PRIORITY APPLN. INFO.:			GB 2000-16811	A 20000707
			WO 2001-GB3034	W 20010706
IT 388621-72-5 749193-44-0				
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
			(lipid-raft targeting using; membrane binding peptides of CD59 and DAF derivs. in targeting lipid rafts of cell membranes for treatment of inflammatory and immune disorders)	
RN 388621-72-5 CAPLUS				
CN L-Cysteinateamide, N-(1-oxotetradecyl)glycyl-L-seryl-L-seryl-L-lysyl-L-seryl-L-prolyl-L-seryl-L-lysyl-L-lysyl-L-lysyl-L-lysyl-L-prolylglycyl-L- α -glutamyl-S-[1-[5-[(3 or 4)-carboxy-4(or 3)-(3,6-diamino-4,5-disulfoxanthylium-9-yl)benzoyl]aminopentyl]-2,5-dioxo-3-pyrrolidinyl]-, inner salt (9CI) (CA INDEX NAME)				





RN 749193-44-0 CAPLUS
 CN Xanthylium, 3,6-diamino-9-[2-carboxy-4(or 5)-[[[5-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)pentyl]amino]carbonyl]phenyl]-4,5-disulfo-, inner salt (9CI) (CA INDEX NAME)



AB The present invention provides membrane binding elements associated with a soluble derivative of complement regulatory polypeptides CD59 or DAF that bind lipid raft components for delivery of compds. to lipid rafts to modulate intracellular or extracellular activity. Hence, this invention can be used in the treatment of inflammatory and other immune disorders. A soluble derivative of CD59 or DAF is provided which is associated with two or more heterologous membrane binding peptides with low membrane affinity. These membrane binding elements are soluble in aqueous solution, and the elements are capable of interacting, independently and with thermodn. additivity with components of cellular or artificial membranes exposed to extracellular fluids. Specifically, the membrane binding elements target lipid raft components of the membrane and bind to the lipid rafts to localize the polypeptide at the lipid rafts. Thus, membrane binding elements mediate internalization of the proteins. Components of lipid rafts include one or more of phosphatidylserine, phosphatidyl glycerol, glycosphingolipids, cholesterol, GP1-anchored proteins associated with lipid rafts and other protein components of lipid rafts that may be found on the exo-plasmic cellular surface. Another embodiment of the invention provides soluble derivs. which include a derivatized antibody or antibody fragment which can provide a surrogate receptor localized at a lipid raft to divert a mediator interacting with a lipid raft receptor or which can neutralize a cofactor of the raft needed for signaling. Soluble derivs. also include chemical or biol. compds. that have fluorescent properties or compds. that can form chemical bonds with proteins, sugar groups or lipids with crosslinking groups, enzymes, enzyme substrates or inhibitors and are used to study patching behavior of membrane proteins and lipids in DIGs. Soluble proteins of the present invention can be linked to membrane binding elements by disulfide bonds. Soluble forms of proteins that are normally located in lipid rafts can be produced either by recombinant methods or isolated from human urine or plasma. These proteins can be treated with 2-iminothiolane and further reacted with a pyridylthio group linked to the membrane binding peptide. The membrane binding peptide may also be linked to the soluble protein by a C-terminal cysteine in the soluble protein.

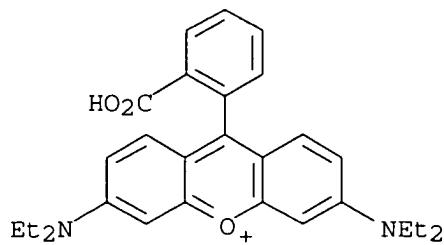
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 30 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:748108 CAPLUS
 DOCUMENT NUMBER: 135:300482
 TITLE: Isolation of functionally active γ -secretase presenilin 1 complex and fluorescence assay for γ -secretase activity and inhibitors
 INVENTOR(S): Roberts, Susan B.; Hendrick, Joseph P.; Vinitsky, Alexander; Lewis, Martin; Smith, David W.; Pak, Roger
 PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
 SOURCE: PCT Int. Appl., 127 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001075435	A2	20011011	WO 2001-US10453	20010330
WO 2001075435	A3	20020808		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2405332	AA	20011011	CA 2001-2405332	20010330
US 2002025540	A1	20020228	US 2001-823153	20010330
US 6713248	B2	20040330		
EP 1305634	A2	20030502	EP 2001-922976	20010330
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004505608	T2	20040226	JP 2001-572863	20010330
US 2004121411	A1	20040624	US 2003-713981	20031114
PRIORITY APPLN. INFO.:			US 2000-194495P	P 20000403
			US 2001-823153	A3 20010330
			WO 2001-US10453	W 20010330

IT 81-88-9 2321-07-5, Fluorescein 70281-37-7,
 Tetramethylrhodamine 247144-99-6
 RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (isolation of functionally active γ -secretase presenilin 1 complex and fluorescence assay for γ -secretase activity and inhibitors)

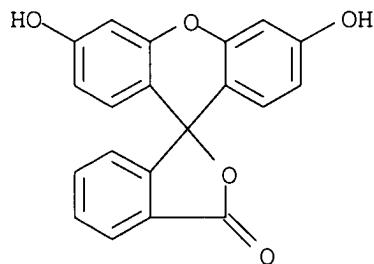
RN 81-88-9 CAPLUS
 CN Xanthylium, 9-(2-carboxyphenyl)-3,6-bis(diethylamino)-, chloride (9CI)
 (CA INDEX NAME)



● Cl⁻

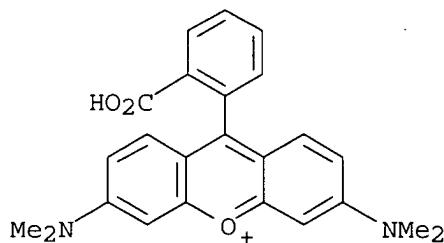
RN 2321-07-5 CAPLUS

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy- (9CI)
(CA INDEX NAME)



RN 70281-37-7 CAPLUS

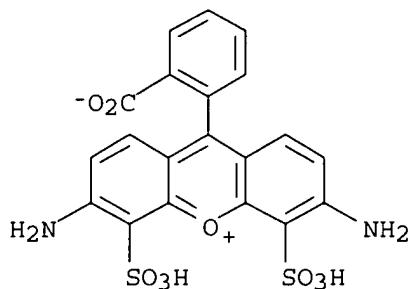
CN Xanthylium, 9-(2-carboxyphenyl)-3,6-bis(dimethylamino)-, chloride (9CI)
(CA INDEX NAME)



● Cl⁻

RN 247144-99-6 CAPLUS

CN Xanthylium, 3,6-diamino-9-[2,4(or 2,5)-dicarboxyphenyl]-4,5-disulfo-,
inner salt, trilithium salt (9CI) (CA INDEX NAME)

D1—CO₂H

●3 Li

AB The present invention provides an isolated, functionally-active protein that catalyzes cleavage of a γ -secretase **substrate**. The functional activity of the isolated protein suggests that the isolated protein includes γ -secretase. In one embodiment, the isolated γ -secretase protein is associated with presenilin 1. The present invention also relates to homogeneous **methods** for monitoring cleavage of β -amyloid precursor protein (β AAPP) by γ -secretase, wherein the steps of isolating and retrieving cleavage products have been eliminated. Cleavage can be detected by binding a pair of fluorescent adducts to the γ -cleaved β AAPP fragment. Preferably, a first fluorescent adduct binds to the carboxy-terminal end of the γ -cleaved β AAPP fragment, with substantially no cross-reactivity to uncleaved β AAPP or to other types of γ -cleaved β AAPP fragments, while a second fluorescent adduct binds to a portion within the amino-terminal region on the γ -cleaved β AAPP fragment. Detection of binding to the γ -cleaved β AAPP fragment is determined by monitoring the fluorescent energy transfer between the adducts.

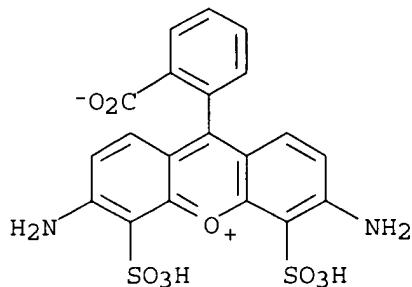
L11 ANSWER 31 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:748054 CAPLUS
 DOCUMENT NUMBER: 135:299485
 TITLE: Compositions and **methods** for detecting and quantifying gene expression in microarrays
 INVENTOR(S): Lowe, David G.; Marsters, James C., Jr.; Robbie, Edward P.; Smith, Victoria
 PATENT ASSIGNEE(S): Genentech, Inc., USA
 SOURCE: PCT Int. Appl., 54 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001075166	A2	20011011	WO 2001-US10482	20010330
WO 2001075166	A3	20020502		

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 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 CA 2402525 AA 20011011 CA 2001-2402525 20010330
 US 2002081597 A1 20020627 US 2001-823648 20010330
 EP 1276702 A2 20030122 EP 2001-922986 20010330
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 JP 2003529774 T2 20031007 JP 2001-573038 20010330
 US 2003190660 A1 20031009 US 2003-405329 20030402
 PRIORITY APPLN. INFO.: US 2000-193767P P 20000331
 US 2001-823648 A1 20010330
 WO 2001-US10482 W 20010330

IT 247144-99-6D, Alexa 488, conjugated with dUTP
 RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (labeled probe; compns. and methods for detecting and quantifying gene expression in microarrays)
 RN 247144-99-6 CAPLUS
 CN Xanthylium, 3,6-diamino-9-[2,4(or 2,5)-dicarboxyphenyl]-4,5-disulfo-, inner salt, trilithium salt (9CI) (CA INDEX NAME)

D1-CO₂H

●3 Li

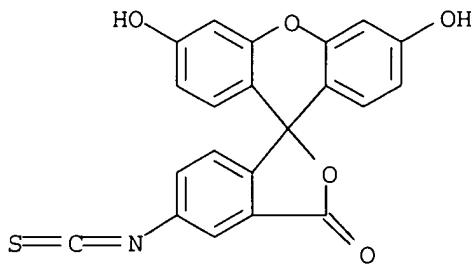
AB Compns. and methods for improving detection sensitivity in nucleic acid microarray anal. are disclosed, including methods of purifying nucleic acids, methods of synthesizing fluorescent DNA probes, methods of hybridization, and methods of activating a substrate for target mol. attachment. The compns. and methods of this invention include synthesis of cDNA, sDNA, or cRNA probes from cellular RNA by in vitro transcription and/or a single-round of reverse transcription with incorporation of fluorochromes. Specific procedures for microarray slide preparation to decrease background fluorescence are given. For

example, silanization of glass slides with toluene as the solvent is preferred. In addition, unmodified polynucleotides can attach to a glass slide treated with 3-aminopropyltriethoxysilane followed by phenylene diisothiocyanate. Modified target DNA can also be **synthesized** using PCR primers which contain a primary amine and an alkyl **linker** attached to the 5'-end. The modified target DNA is then reacted with activated silanized glass slides. Microarray hybridization buffers containing alkylammonium salts, dimethylsulfoxide and formamide and lacking the detergent sodium dodecyl sulfate also improved the detection sensitivity. The invention is illustrated with microarrays hybridized with fluorescent probes **synthesized** from very small quantities of RNA isolated from microdissected tumor cells, paraffin-embedded liver and colon tissue, fresh frozen liver tissue, and fresh frozen colon tissue. The microarray expts. were designed to compare tissue sample **preparation methods** and gene expression in tumor vs. healthy tissues. An example of the sensitivity of these **methods** shows a microarray hybridized with sDNA probes from one round of amplification of 2 pg of RNA from an ovarian carcinoma cell line.

L11 ANSWER 34 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:208508 CAPLUS
 DOCUMENT NUMBER: 134:249215
 TITLE: **Substrates** and screening **methods**
 for transport proteins
 INVENTOR(S): Dower, William J.; Gallop, Mark; Barrett, Ronald W.;
 Cundy, Kenneth C.; Chernov-Rogan, Tania
 PATENT ASSIGNEE(S): Xenopore, Inc., USA
 SOURCE: PCT Int. Appl., 144 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

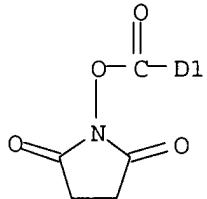
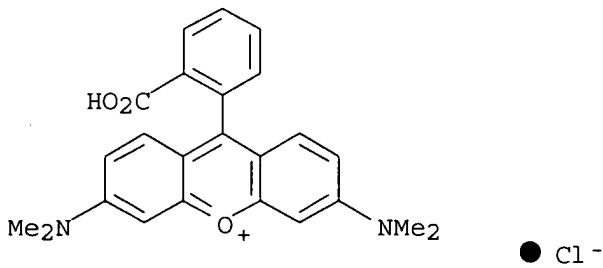
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001020331	A1	20010322	WO 2000-US25439	20000914
WO 2001020331	C2	20021003		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1212619	A1	20020612	EP 2000-966735	20000914
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
PRIORITY APPLN. INFO.:			US 1999-154071P	P 19990914
			WO 2000-US25439	W 20000914
IT 3326-32-7, Fluorescein-5-isothiocyanate 120718-52-7				
RL: RCT (Reactant); RACT (Reactant or reagent)				
(substrates and screening methods for transport proteins)				
RN 3326-32-7 CAPLUS				
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy-5-				

isothiocyanato- (9CI) (CA INDEX NAME)



RN 120718-52-7 CAPLUS

CN Xanthylium, 9-[2-carboxy-4(or 5)-[(2,5-dioxo-1-pyrrolidinyl)oxy]carbonylphenyl]-3,6-bis(dimethylamino)-, chloride (9CI) (CA INDEX NAME)



AB A variety of **methods** for assaying libraries of test compds. as ligands and/or **substrates** of transport proteins, including both carrier-type and receptor-type transport proteins, are provided. Both *in vitro* and *in vivo* screening **methods** are disclosed. Also provided are **methods** for screening DNA libraries to identify members that encode transport proteins. Pharmaceutical compns. including compds. identified via the screening **methods** are also provided. CHO K1 cells expressing PEPT1 transporter of human or rat were prepared. Fluorescent XP10486 was **synthesized** and used as PEPT1 **substrate**.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 36 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:314865 CAPLUS

DOCUMENT NUMBER: 132:344077

TITLE: **Method** for determining mRNA tissue distribution using restriction endonuclease digestion

and PCR amplification for database indexing and drug screening

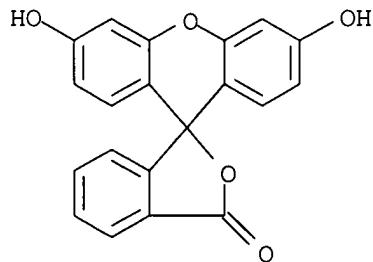
INVENTOR(S) : Hasel, Karl W.; Hilbush, Brian S.
 PATENT ASSIGNEE(S) : Digital Gene Technologies, Inc., USA
 SOURCE: PCT Int. Appl., 114 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000026406	A1	20000511	WO 1999-US23655	19991014
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2350168	AA	20000511	CA 1999-2350168	19991014
EP 1127159	A1	20010829	EP 1999-954838	19991014
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JP 2002528135	T2	20020903	JP 2000-579778	19991014
US 2002012922	A1	20020131	US 2001-775217	20010201
NO 2001002203	A	20010702	NO 2001-2203	20010503
PRIORITY APPLN. INFO.:			US 1998-186869	A 19981104
			WO 1999-US23655	W 19991014

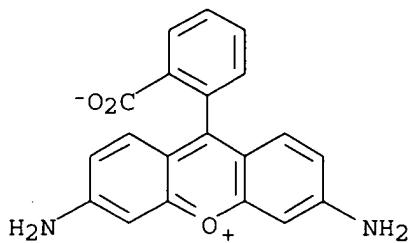
IT 2321-07-5 30378-58-6 91809-66-4D, inner salt
 91809-67-5

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (fluorescent label; method for determining mRNA tissue
 distribution using restriction endonuclease digestion and PCR
 amplification for database indexing and drug screening)

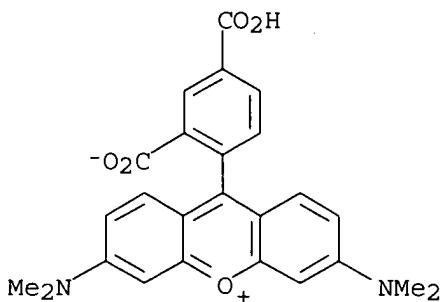
RN 2321-07-5 CAPLUS
 CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy- (9CI)
 (CA INDEX NAME)



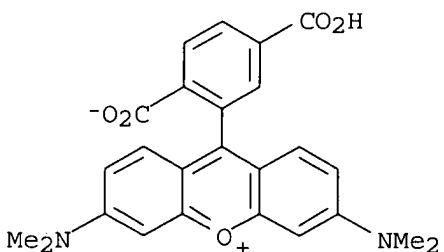
RN 30378-58-6 CAPLUS
 CN Xanthylium, 3,6-diamino-9-(2-carboxyphenyl)-, inner salt (9CI) (CA INDEX
 NAME)



RN 91809-66-4 CAPLUS
CN Xanthylium, 9-(2,4-dicarboxyphenyl)-3,6-bis(dimethylamino)-, inner salt
(9CI) (CA INDEX NAME)



RN 91809-67-5 CAPLUS
CN Xanthylium, 9-(2,5-dicarboxyphenyl)-3,6-bis(dimethylamino)-, inner salt
(9CI) (CA INDEX NAME)



AB An improved **method** for the simultaneous sequence-specific identification of mRNAs in a mRNA population allows the visualization of nearly every mRNA expressed by a tissue as a distinct band on a gel whose intensity corresponds roughly to the concentration of the mRNA. In general, the

method comprises the formation of cDNA using anchor primers to fix a 3'-endpoint, producing cloned inserts from the cDNA in a vector containing a bacteriophage-specific promoter for subsequent RNA **synthesis**, generating linearized fragments of the cloned inserts by restriction endonuclease digestion, **preparing** cRNA, transcribing cDNA from the cRNA, and performing two sequence-specific PCR amplifications of the cDNA. The products of the second PCR amplification step are resolved by gel electrophoresis to obtain the length and the amount of each. In preferred embodiments, the **method** comprises comparing the length and at

least part of the nucleotide sequence of the PCR products to expected values determined from a database of nucleotide sequences. Such database containing information on mRNA sequences, gene mapping, and cellular distribution is further claimed. The **method** can identify changes in expression of mRNA associated with the administration of drugs or with physiol. or pathol. conditions. Also provided are vectors, host cells, and primers useful for the practice of the improved **method**. The primers are preferably **labeled** and contain phosphorothioate **linkages**. Two mRNA samples from serum-starved and serum-added human MG63 osteosarcoma cells were analyzed by the **method** of this invention with results showing significant improvement over the previous **method** using only one PCR step.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 37 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2000:43460 CAPLUS
 DOCUMENT NUMBER: 132:109363
 TITLE: Colorants having rotaxane structure, **labeling** agents and **method** for their use
 INVENTOR(S): Suzuki, Tomomi; Noda, Hitoshi; Okazaki, Shigetoshi
 PATENT ASSIGNEE(S): Bunshi Bio Photonics Kenkyusho K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000017183	A2	20000118	JP 1999-116397	19990423
JP 3078793	B2	20000821		
US 6242430	B1	20010605	US 1999-301635	19990429
PRIORITY APPLN. INFO.:			JP 1998-121255	A 19980430

OTHER SOURCE(S): MARPAT 132:109363

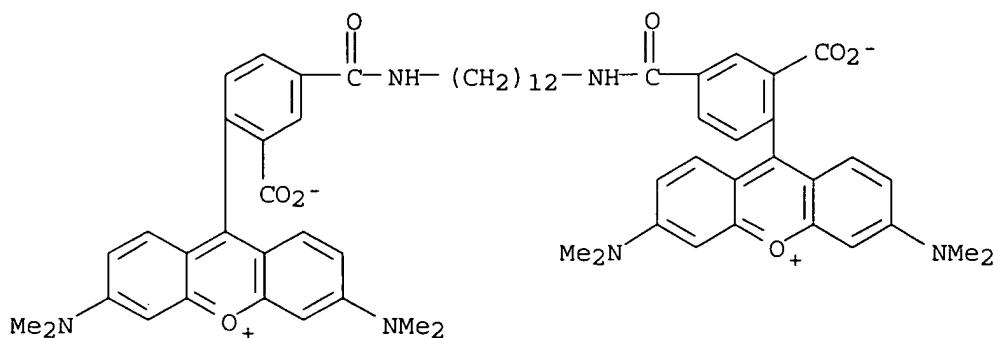
IT 255382-20-8P 255382-23-1P 255382-30-0P
 RL: ARG (Analytical reagent use); IMF (Industrial manufacture); ANST (Analytical study); PREP (Preparation); USES (Uses)
 (colorants having rotaxane structure, **labeling** agents and **method** for use)

RN 255382-20-8 CAPLUS

CN α -Cyclodextrin, rotaxane compd. with 9,9'-(1,12-dodecanediylbis[iminocarbonyl(2-carboxy-4,1-phenylene)])bis[3,6-bis(dimethylamino)xanthylum] bis(inner salt) (1:1) (9CI) (CA INDEX NAME)

CM 1

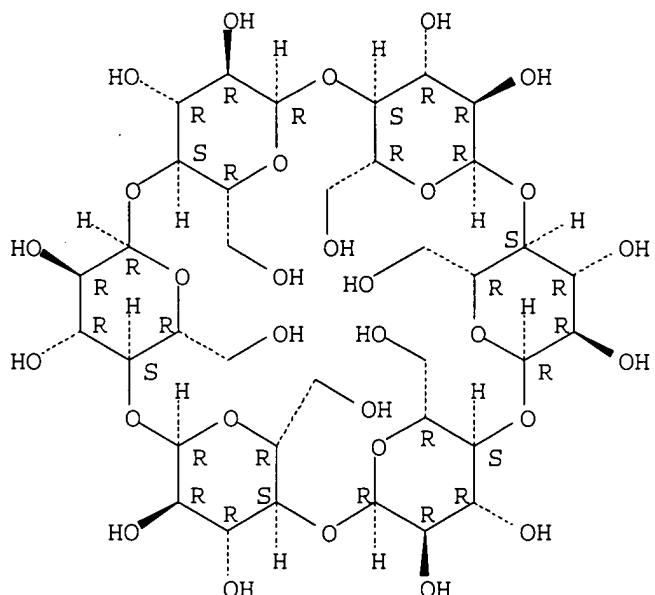
CRN 255382-19-5
 CMF C62 H68 N6 O8



CM 2

CRN 10016-20-3
CMF C36 H60 O30

Absolute stereochemistry.



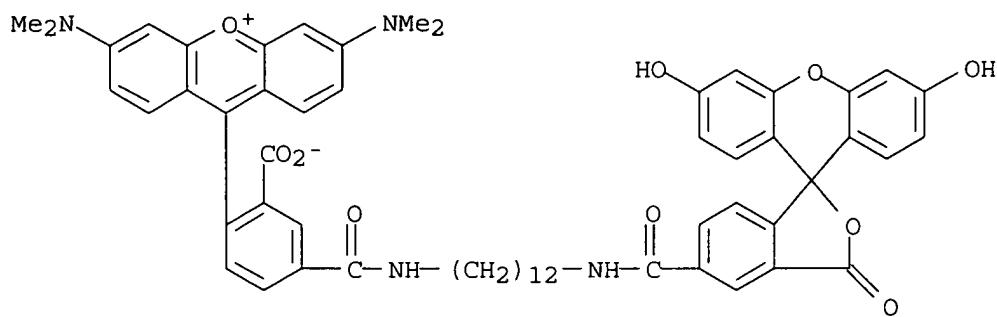
RN 255382-23-1 CAPLUS

CN α -Cyclodextrin, compd. with 9-[2-carboxy-4-[[[12-[[3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]dodecyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)xanthylium inner salt (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 255382-22-0
CMF C58 H58 N4 O10

10/716,165

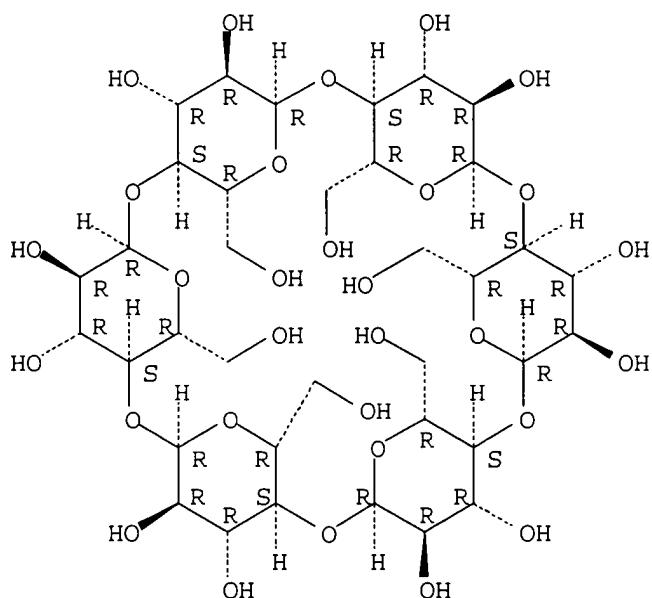


CM 2

CRN 10016-20-3

CMF C36 H60 O30

Absolute stereochemistry.



RN 255382-30-0 CAPLUS

CN α -Cyclodextrin, compd. with 9-[2-carboxy-4-[[[12-[[4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxobutyl]amino]dodecyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)xanthylum inner salt (1:1) (9CI) (CA INDEX NAME)

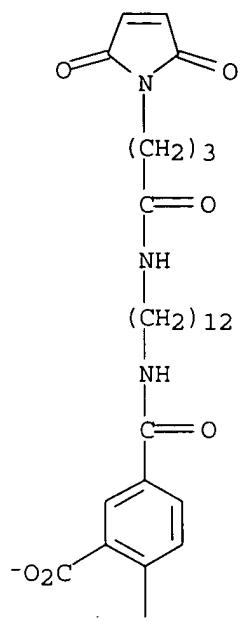
CM 1

CRN 255382-29-7

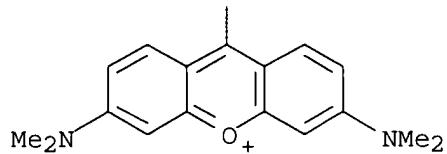
CMF C45 H55 N5 O7

10/716,165

PAGE 1-A



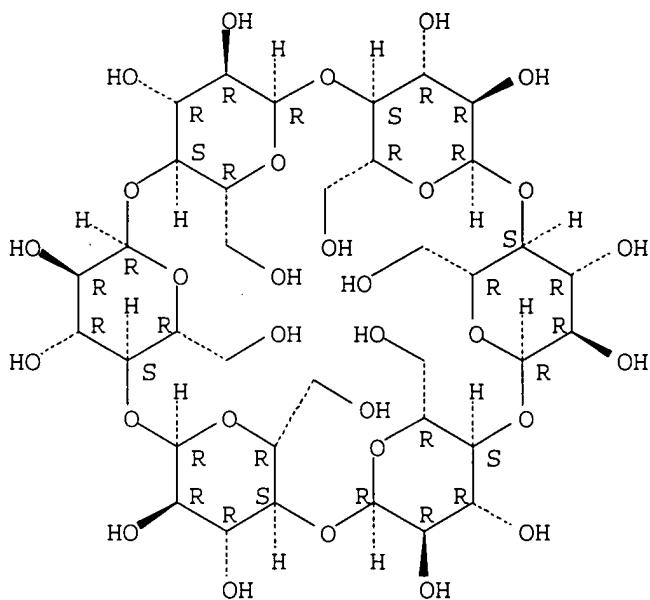
PAGE 2-A



CM 2

CRN 10016-20-3
CMF C36 H60 O30

Absolute stereochemistry.



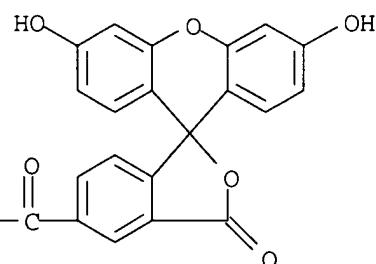
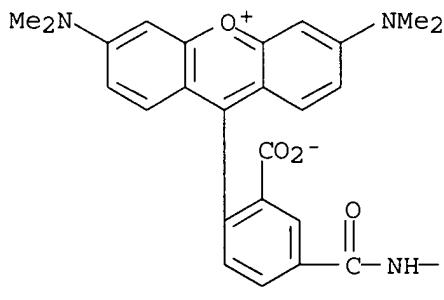
IT 255382-22-0P 255382-31-1P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; colorants having rotaxane structure, labeling agents and method for use)

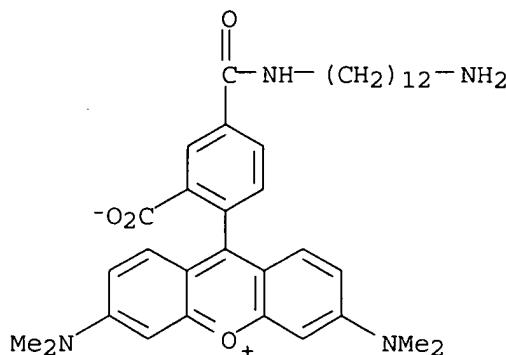
RN 255382-22-0 CAPLUS

CN Xanthylum, 9-[2-carboxy-4-[[[12-[[3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]dodecyl]amino]carbonylphenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)



RN 255382-31-1 CAPLUS

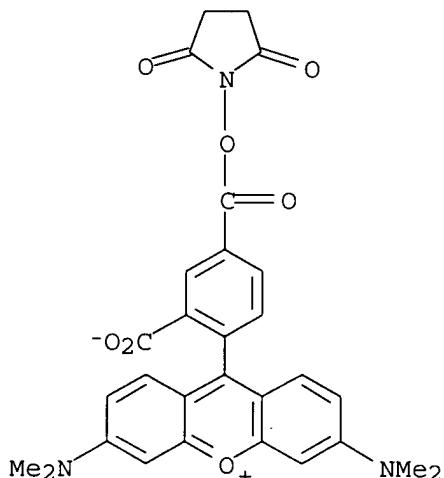
CN Xanthylum, 9-[4-[[12-aminododecyl]amino]carbonyl]-2-carboxyphenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)



IT 150810-68-7

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reactant/colorants; colorants having rotaxane structure,
labeling agents and **method** for use)

RN 150810-68-7 CAPLUS

CN Xanthylium, 9-[2-carboxy-4-[(2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]phenyl
]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)

AB The colorants with good water solubility, useful for biomol. **labeling**, consist of a cyclodextrin ring threaded by a linear mol. chain which can bear colorants of the same or different type on 2 ends, e.g., fluorescent pigments. Thus, mixing 100 μL a saturated solution of α-cyclodextrin in DMSO with 3 mg 1,12-diaminododecane and 25 mg 5-carboxytetramethylrhodamine succinimidyl ester dissolved in 50 μL DMF at 40° for overnight gave a rotaxane compound

L11 ANSWER 40 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:323032 CAPLUS

DOCUMENT NUMBER: 131:141616

TITLE: A simple and sensitive **method** for in vitro quantitation of abasic sites in DNA

AUTHOR(S): Boturyn, Didier; Constant, Jean-Francois; Defrancq, Eric; Lhomme, Jean; Barbin, Alain; Wild, Christopher

P.

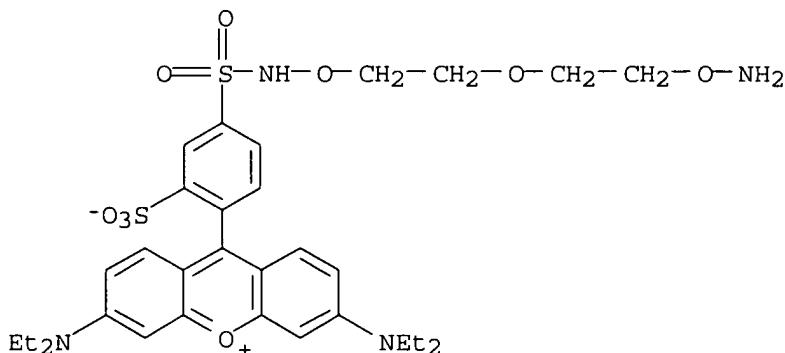
CORPORATE SOURCE: LEDSS Chimie Bioorganique, Universite Joseph Fourier,
Grenoble, 38041, Fr.
 SOURCE: Chemical Research in Toxicology (1999), 12(6), 476-482
 CODEN: CRTOEC; ISSN: 0893-228X
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

IT 190249-83-3

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (method for in vitro quantitation of abasic sites in DNA
 using fluorescent probes)

RN 190249-83-3 CAPLUS

CN Xanthylium, 9-[4-[[[2-(aminoxy)ethoxy]ethoxy]amino]sulfonyl]-2-sulfophenyl]-3,6-bis(diethylamino)-, inner salt (9CI) (CA INDEX NAME)



AB A novel **method** for the quantitation of abasic sites (AP sites) in DNA is described. As abasic sites can be generated by controlled thermal treatment of base-modified DNA, this **method** can be used for estimation of the extent of DNA damage resulting from exposure to genotoxic agents. The **method** involves use of probe mols. 1 and 2 that contain a fluorescent **label linked** to an aminoxy group which reacts specifically with the aldehydic function of the ring-opened form of abasic sites. The two fluorescent probes 1 and 2 were found to react with 2-deoxyribose, a model **substrate**, at the optimum of pH 4.0. As spontaneous depurination occurs at low pH, the reactions with abasic DNA were carried out at neutral pH with an excess concentration of the probes. Studies with alkylated, depurinated calf thymus

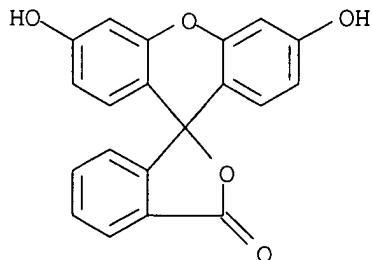
DNA showed that the **method** is selective and quant. Good correlations were found between the level of 7-methylguanine (7-MeGua), generated in vitro in DNA by the methylating agent di-Me sulfate, and the amount of AP sites as determined by the **method** presented here. In addition, similar correlations were found when the assay was used to detect abasic sites in DNA isolated from rats treated with carcinogenic alkylating agents. In each case, the level of abasic sites, as expected, is slightly higher than the level of 7-MeGua which is known to represent about 70% of the total modifications of DNA following exposure to the methylating agent. This **method** may be useful not only in exptl. settings but also in studies of DNA damage in humans resulting from chemotherapy or exposure to environmental agents.

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

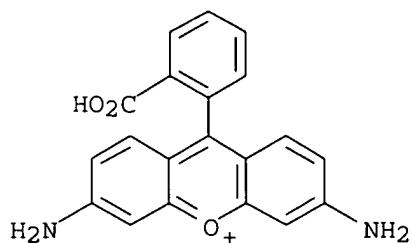
L11 ANSWER 42 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1998:785593 CAPLUS
 DOCUMENT NUMBER: 130:38651
 TITLE: **Methods for testing oligonucleotide arrays**
 INVENTOR(S): McGall, Glenn
 PATENT ASSIGNEE(S): Affymetrix, Inc., USA
 SOURCE: U.S., 24 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5843655	A	19981201	US 1995-531155	19950918
US 6238862	B1	20010529	US 1997-995265	19971219
US 2002009729	A1	20020124	US 2001-781537	20010208
US 6576425	B2	20030610		
US 2004076987	A1	20040422	US 2003-457994	20030610
PRIORITY APPLN. INFO.:			US 1995-531155	A1 19950918
			US 1997-995265	A1 19971219
			US 2001-781537	A1 20010208

IT 2321-07-5, Fluorescein 13558-31-1
 RL: ARU (Analytical role, unclassified); ANST (Analytical study)
 (oligonucleotides labeled with; methods for testing
 oligonucleotide arrays)
 RN 2321-07-5 CAPLUS
 CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy- (9CI)
 (CA INDEX NAME)



RN 13558-31-1 CAPLUS
 CN Xanthylum, 3,6-diamino-9-(2-carboxyphenyl)-, chloride (9CI) (CA INDEX
 NAME)

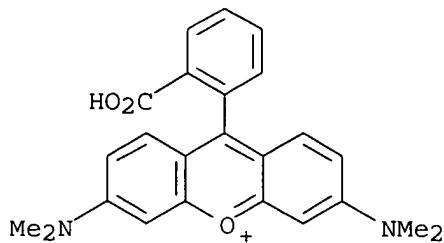


● Cl -

AB Methods for testing oligonucleotide arrays are disclosed including methods for testing the efficiency of nucleotide coupling; methods for testing amts. of deprotected oligonucleotides; methods for determining amts. of depurinated oligonucleotides; and methods of detecting the presence of cleavable structural features, such as double-stranded nucleic acids. Thus, a method for determining amount of depurination of oligonucleotides synthesized on a substrate by spatially directed oligonucleotide synthesis comprises (1) providing a substrate with linkers having an active site for oligonucleotide synthesis, (2) synthesizing an ensemble of sequence-specific oligonucleotides in an area of the substrate, (3) attaching a detectable label to the oligonucleotides in the ensemble, (4) exposing the ensemble to a test condition, (5) exposing the ensemble to cleavage conditions that cause cleavage of depurinated oligonucleotides, and (6) determining the amount of detectable label in the area, the amount of label being a determination of amount of depurination.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 43 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1998:505434 CAPLUS
 DOCUMENT NUMBER: 129:92521
 TITLE: Photoactivatable Cross-Linked Polyacrylamide for the Site-Selective Immobilization of Antigens and Antibodies
 AUTHOR(S): Sanford, Melanie S.; Charles, Paul T.; Commisso, Sarah M.; Roberts, Jenna C.; Conrad, David W.
 CORPORATE SOURCE: Center for Biomolecular Science and Engineering, Naval Research Laboratory, Washington, DC, 20375-5348, USA
 SOURCE: Chemistry of Materials (1998), 10(6), 1510-1520
 CODEN: CMATEX; ISSN: 0897-4756
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 70281-37-7, Tetramethylrhodamine
 RL: NUU (Other use, unclassified); USES (Uses)
 (photoactivatable cross-linked polyacrylamide for site-selective immobilization of antigens and antibodies)
 RN 70281-37-7 CAPLUS
 CN Xanthylium, 9-(2-carboxyphenyl)-3,6-bis(dimethylamino)-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

AB This paper describes the **synthesis**, characterization, and photochem. behavior of a new light-activated material for the photoimmobilization of antigens. The material is a derivative of cross-linked polyacrylamide that incorporates photoactive o-nitrobenzyl carbamates. When irradiated, the polymer undergoes a photochem. rearrangement to produce primary amines that can be used as mol. attachment sites. We monitored the photoconversion of thin (1-2 μm) polymer films that were deposited on silicon wafers or fused silica **substrates** using FT IR spectroscopy and UV-vis spectroscopy. To produce patterned polymer-modified **substrates**, we irradiated the material using a photolithog. mask. This **process** yielded 10-μm lines of photogenerated amines, to which an amine-reactive antigen (2,4,6-trinitrobenzenesulfonic acid) was covalently bound. When we used this antigen-patterned **substrate** in a competitive fluorescence immunoassay containing tetramethylrhodamine-**labeled** anti-2,4-dinitrophenyl antibodies and 2,4-dinitrophenol, concns. of 2,4-dinitrophenol as low as 2.3 μg/mL were detectable.

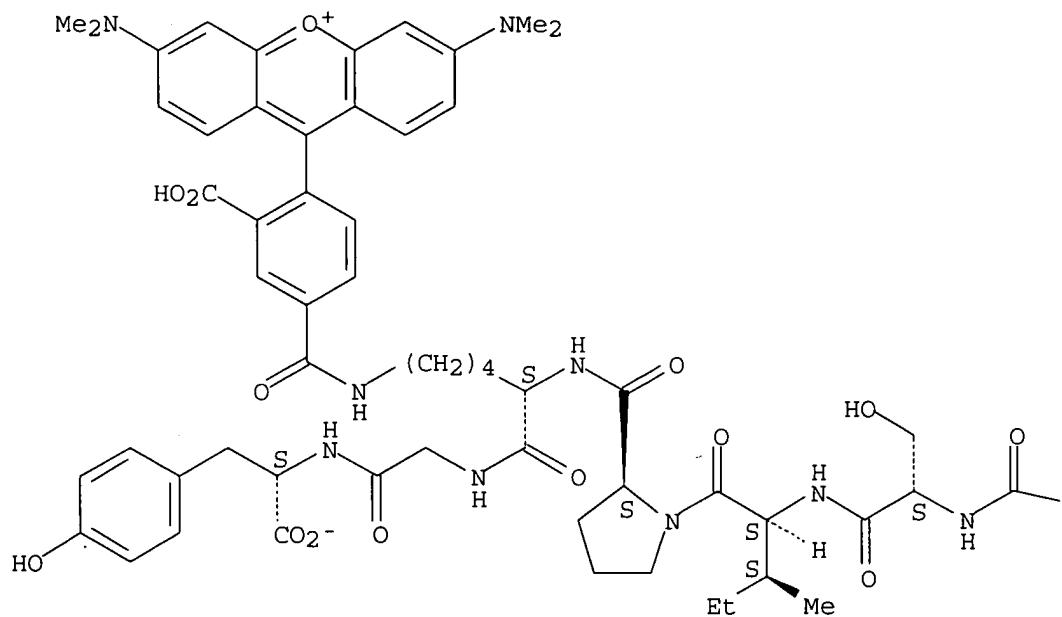
REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

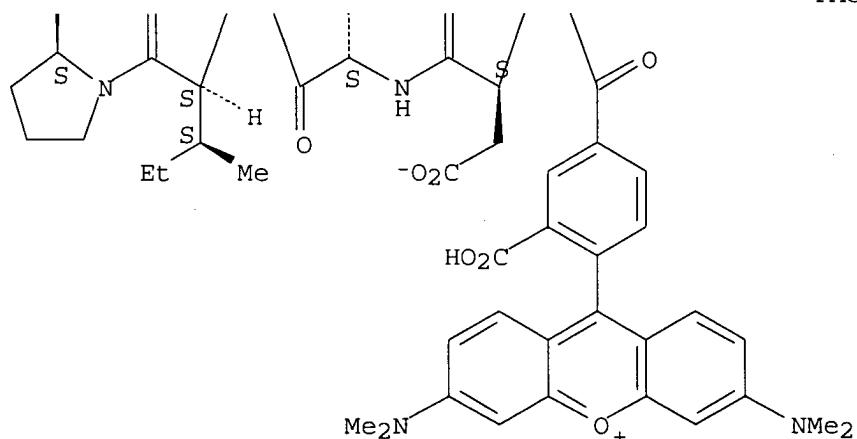
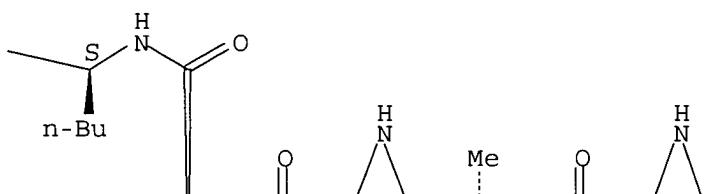
L11 ANSWER 45 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1998:103406 CAPLUS
 DOCUMENT NUMBER: 128:254447
 TITLE: Intramolecular excitonic dimers in protease **substrates**: Modification of the backbone moiety to probe the H-dimer structure
 AUTHOR(S): Packard, Beverly Z.; Komoriya, Akira; Nanda, Vikas;
 Brand, Ludwig
 CORPORATE SOURCE: OncoImmunin Inc., College Park, MD, 20742, USA
 SOURCE: Journal of Physical Chemistry B (1998), 102(10), 1820-1827
 CODEN: JPCBFK; ISSN: 1089-5647
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 205176-31-4 205176-32-5 205176-33-6
 205176-34-7 205176-35-8 205176-36-9
 205176-37-0
 RL: PRP (Properties)
 (modification of the backbone moiety to probe the H-dimer structure of intramol. excitonic dimers in protease **substrates**)

RN 205176-31-4 CAPLUS
CN L-Tyrosine, N-[4-[3,6-bis(dimethylamino)xanthylum-9-yl]-3-carboxybenzoyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[4-[3,6-bis(dimethylamino)xanthylum-9-yl]-3-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

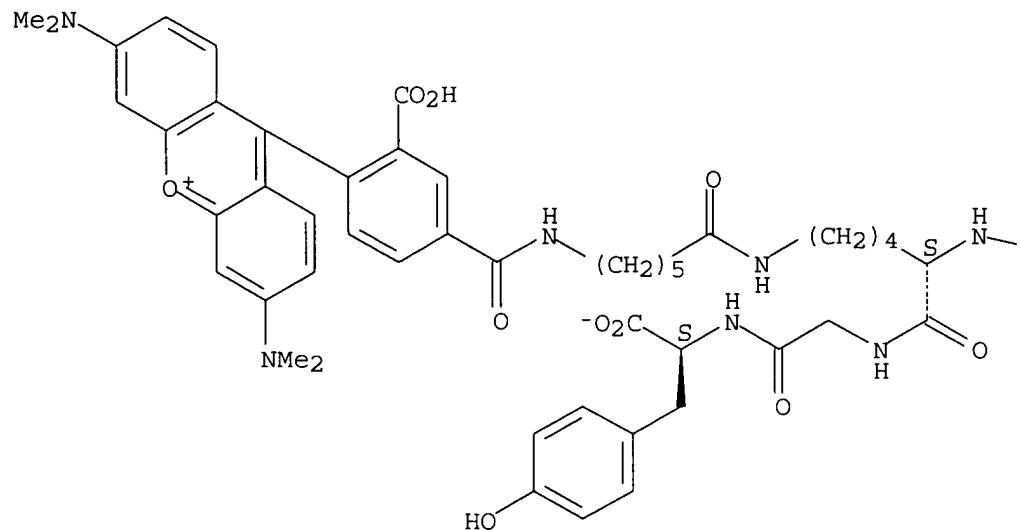




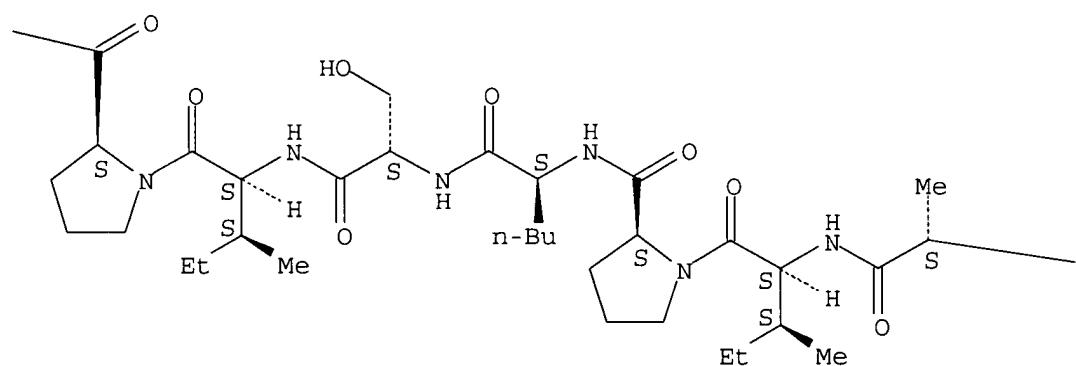
RN 205176-32-5 CAPLUS
 CN L-Tyrosine, N-[4-[3,6-bis(dimethylamino)xanthylidium-9-yl]-3-carboxybenzoyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-proyl-L-norleucyl-L-seryl-L-isoleucyl-L-proyl-N6-[6-[[4-[3,6-bis(dimethylamino)xanthylidium-9-yl]-3-carboxybenzoyl]amino]-1-oxohexyl]-L-lysylglycyl-, bis(inner salt) (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

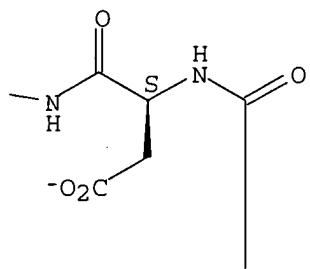


PAGE 1-B



10/716,165

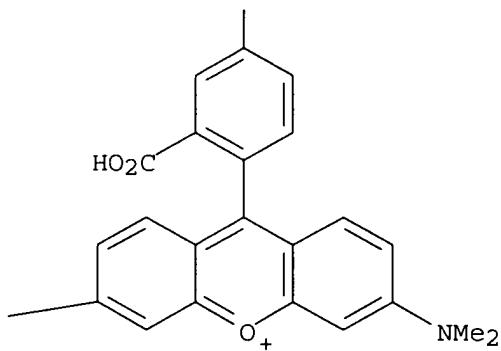
PAGE 1-C



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Me₂N—

PAGE 2-C

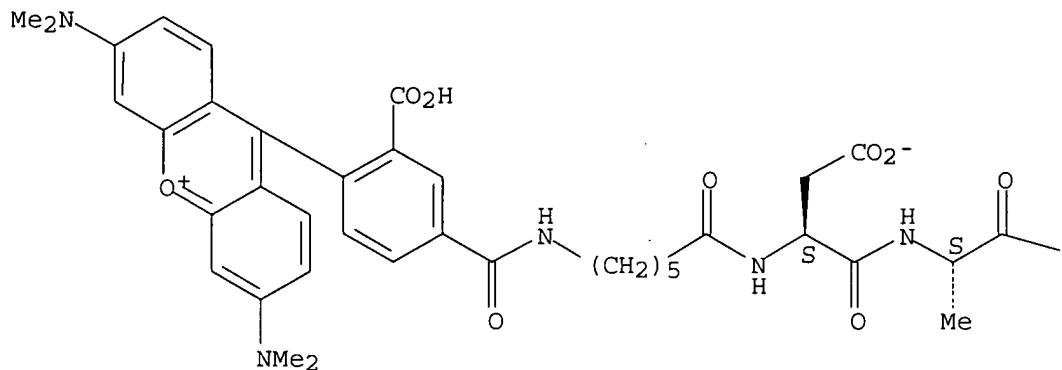


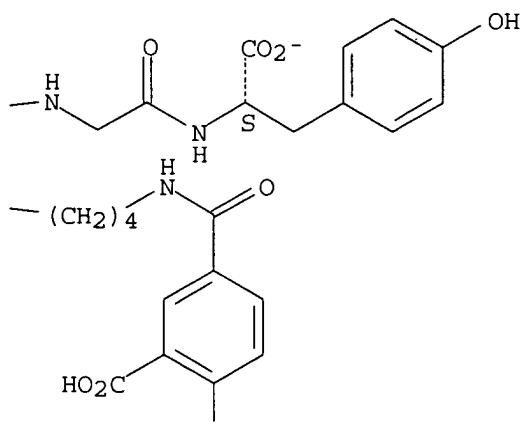
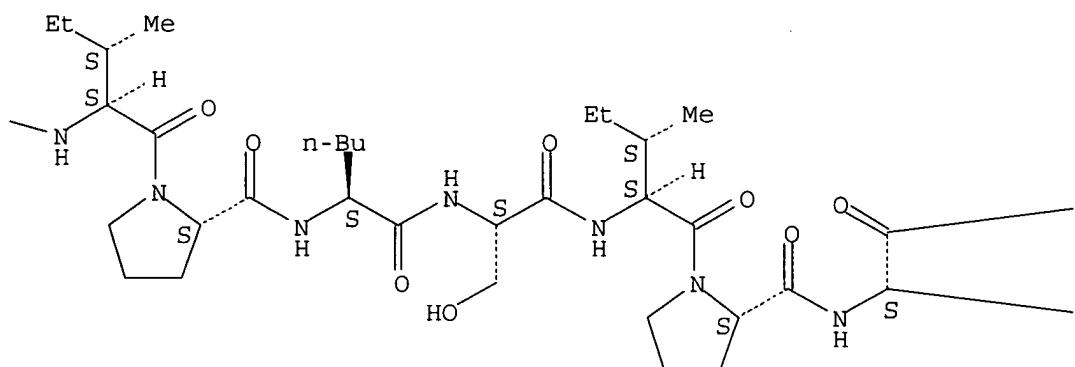
RN 205176-33-6 CAPLUS

CN L-Tyrosine, N-[6-[[4-[3,6-bis(dimethylamino)xanthylidium-9-yl]-3-carboxybenzoyl]amino]-1-oxohexyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[4-[3,6-bis(dimethylamino)xanthylidium-9-yl]-3-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

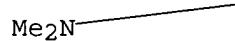
Absolute stereochemistry.

PAGE 1-A

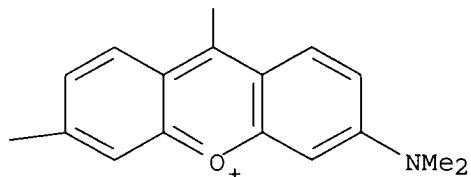




PAGE 2-B



PAGE 2-C

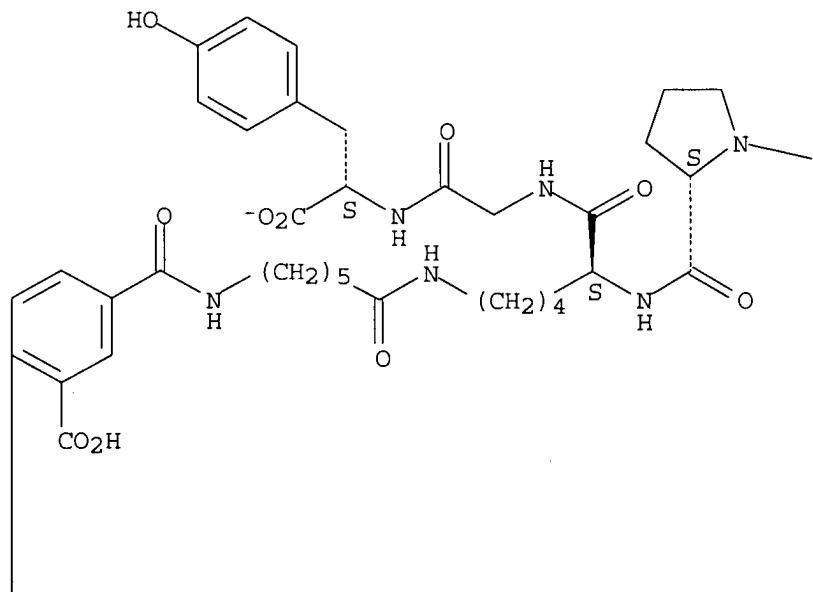


RN 205176-34-7 CAPLUS

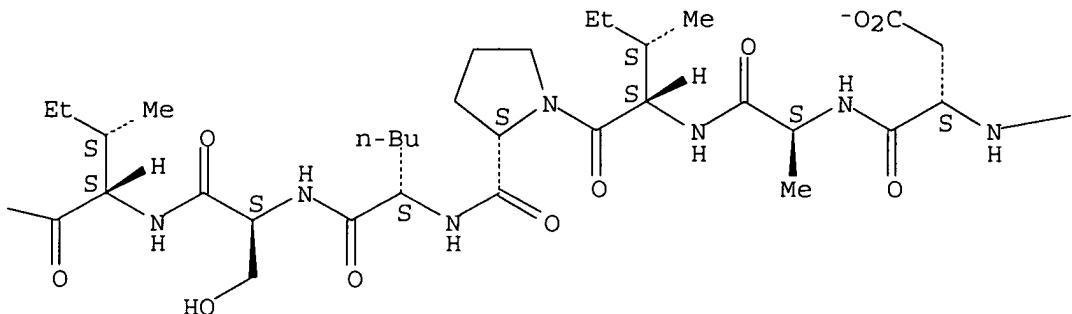
CN L-Tyrosine, N-[6-[(4-[3,6-bis(dimethylamino)xanthyl]amino)-1-oxohexyl]-L- α -aspartyl-L-alanyl-L-isoleucyl-L-proyl-L-norleucyl-L-seryl-L-isoleucyl-L-proyl-N6-[6-[(4-[3,6-bis(dimethylamino)xanthyl]amino)-1-oxohexyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

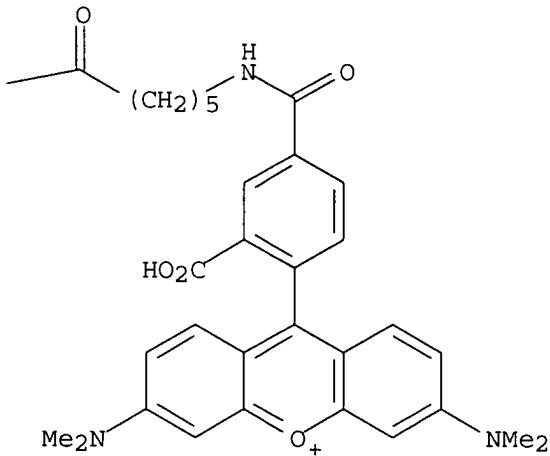
PAGE 1-A



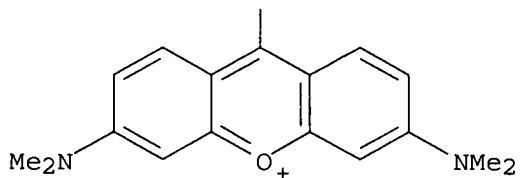
PAGE 1-B



PAGE 1-C



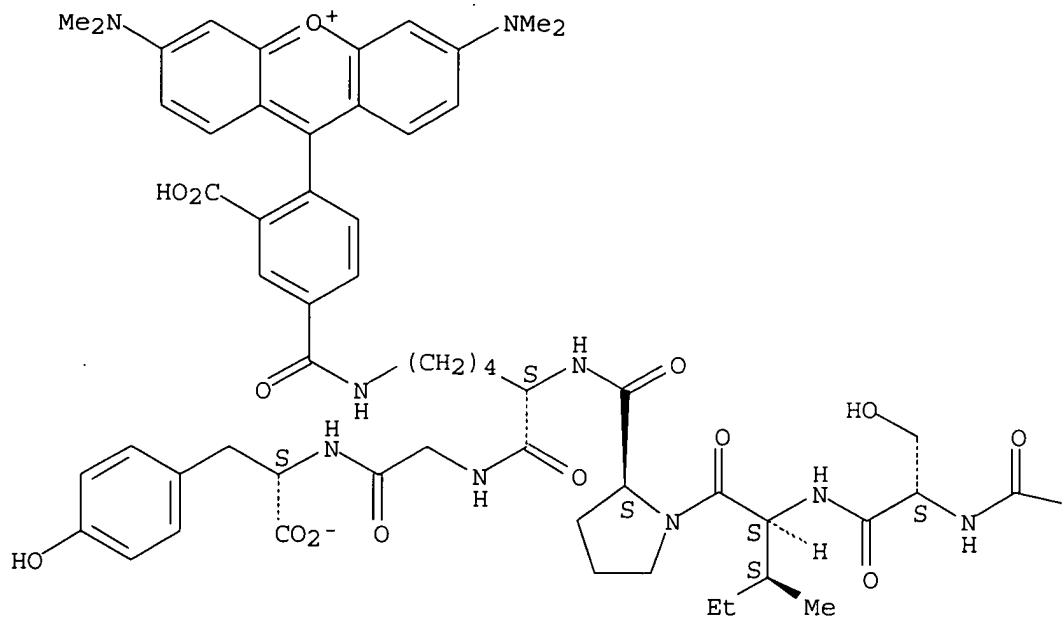
PAGE 2-A



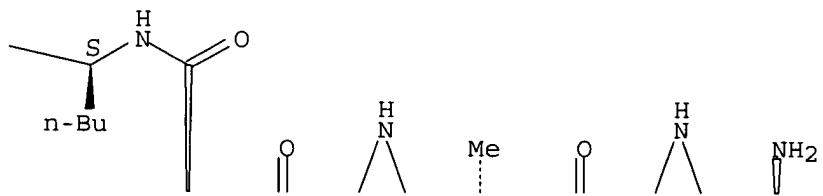
RN 205176-35-8 CAPLUS
 CN L-Tyrosine, N6-[4-[3,6-bis(dimethylamino)xanthyl]ium-9-yl]-3-carboxybenzoyl-L-lysyl-L-alpha-aspartyl-L-alanyl-L-isoleucyl-L-proyl-L-norleucyl-L-seryl-L-isoleucyl-L-proyl-N6-[4-[3,6-bis(dimethylamino)xanthyl]ium-9-yl]-3-carboxybenzoyl-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

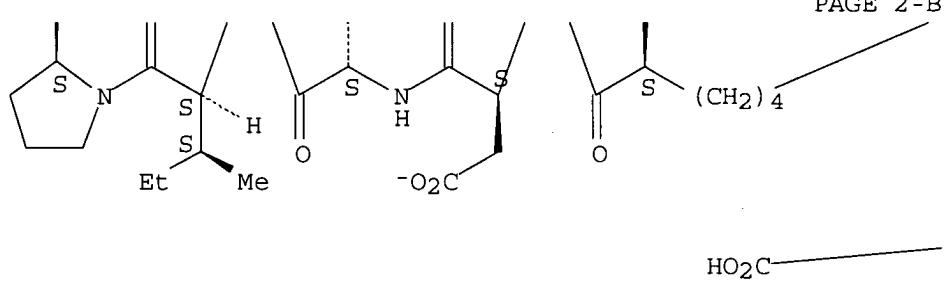
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

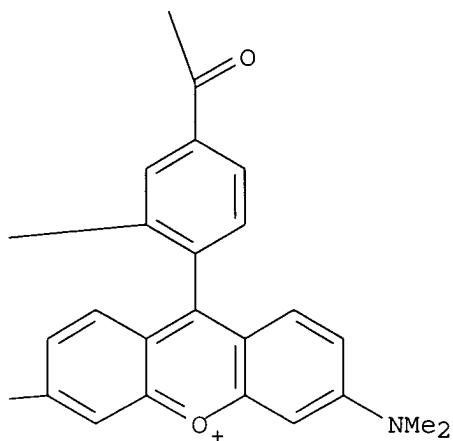




PAGE 2-B

HO₂C—

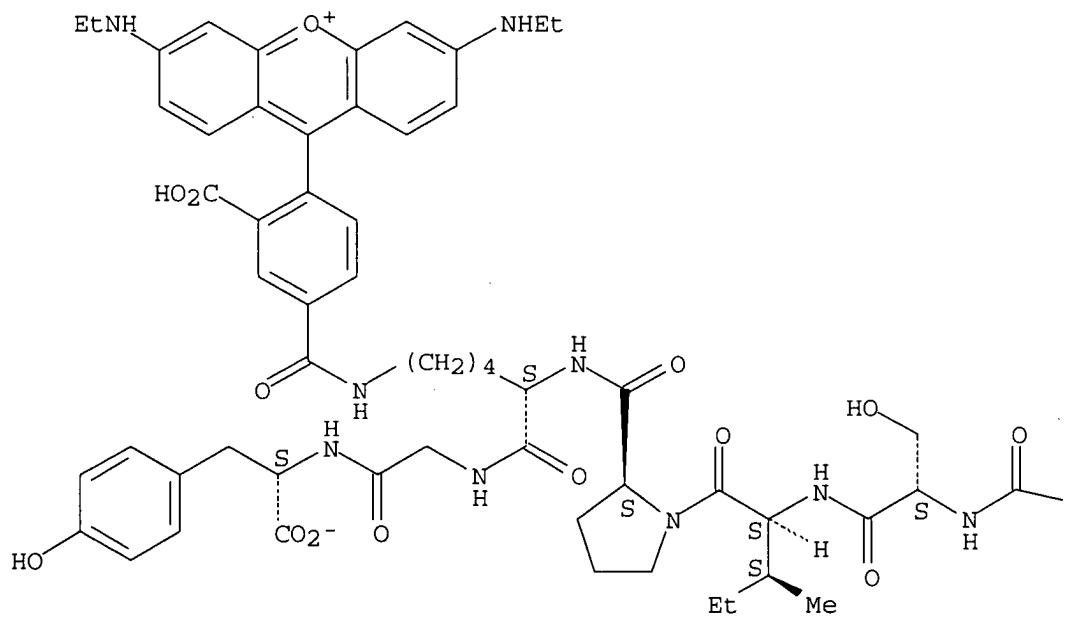
Me₂N—



RN 205176-36-9 CAPLUS

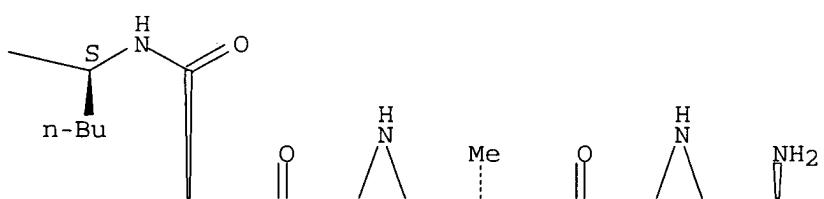
CN L-Tyrosine, N6-[4-[3,6-bis(ethylamino)xanthylum-9-yl]-3-carboxybenzoyl]-L-lysyl-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[4-[3,6-bis(ethylamino)xanthylum-9-yl]-3-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt). (9CI) (CA INDEX NAME)

Absolute stereochemistry.



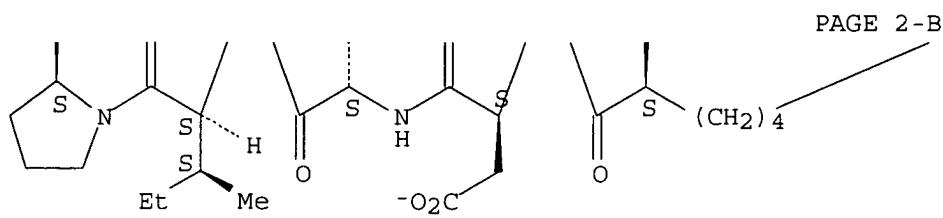
10/716,165

PAGE 1-B

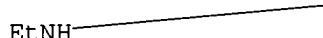
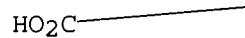


PAGE 1-C

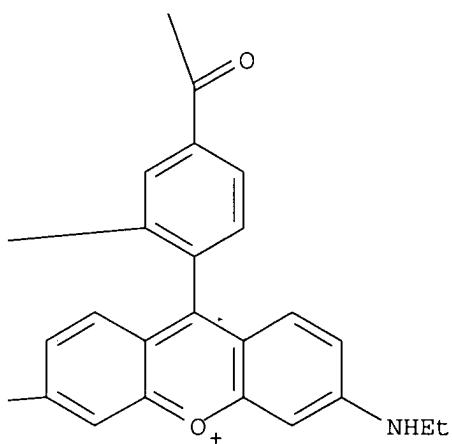




PAGE 2-B



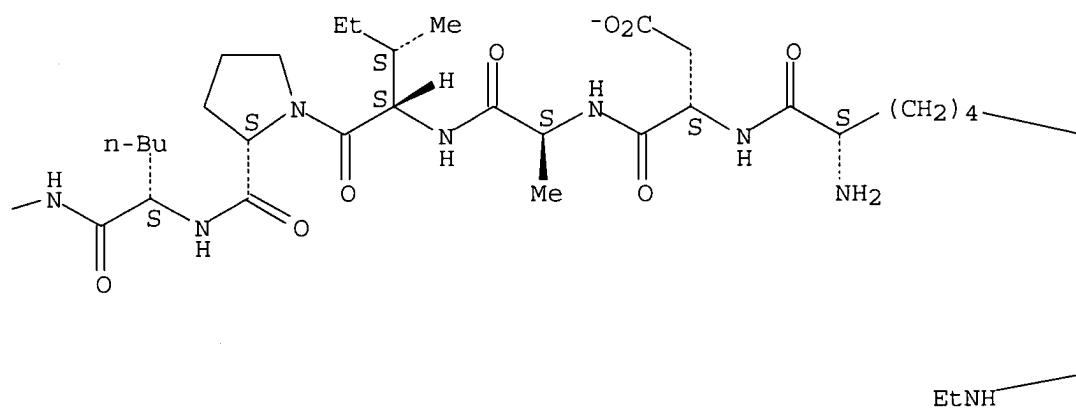
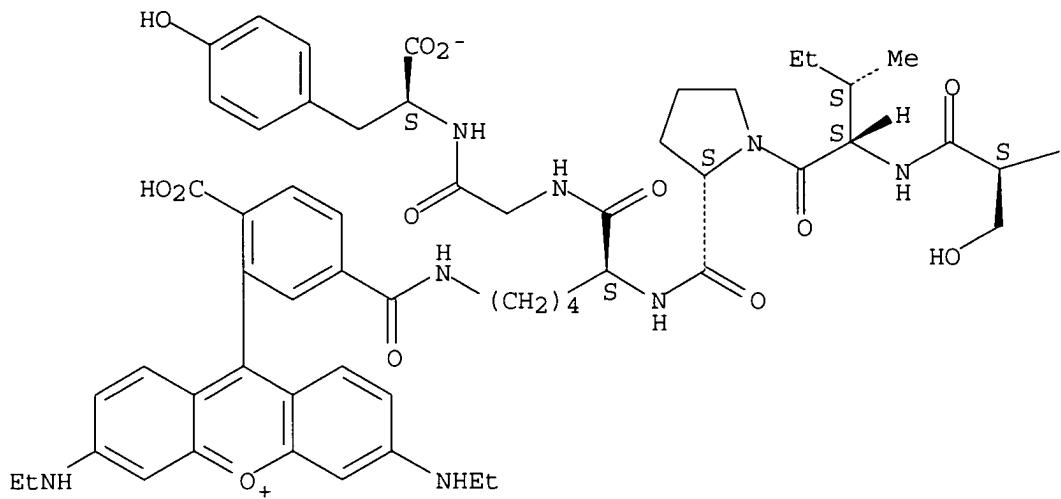
PAGE 2-C

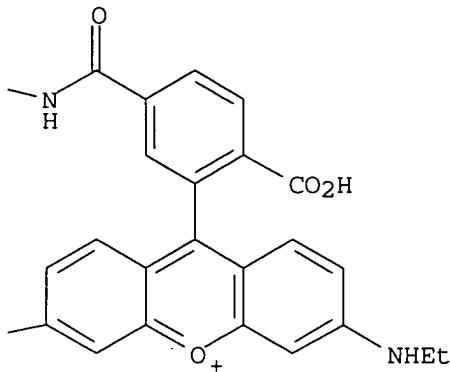


RN 205176-37-0 CAPLUS

CN L-Tyrosine, N6-[3-[3,6-bis(ethylamino)xanthylidium-9-yl]-4-carboxybenzoyl]-L-lysyl-L- α -aspartyl-L-alanyl-L-isoleucyl-L-prolyl-L-norleucyl-L-seryl-L-isoleucyl-L-prolyl-N6-[3-[3,6-bis(ethylamino)xanthylidium-9-yl]-4-carboxybenzoyl]-L-lysylglycyl-, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.





AB NorFES (DAIPN1SIPKGY, N1 = norleucine) is an undecapeptide that contains a recognition sequence and cleavage site for the serine protease elastase. When NorFES is doubly **labeled** with a variety of fluorophores on opposite sides of this amino acid sequence, the fluorescence is quenched due to formation of intramol. ground-state dimers. Although the spectral characteristics of these dimers are predictable by exciton theory, influence of the peptide backbone on H-dimer formation is less well understood. Specifically, factors that modify the attractive forces between and orientation of dyes are not well-characterized. Thus, by varying the dye **linker** moieties, it was sought to evaluate the thermodn. parameters for intramol. H-type dye-dye association and the structures of these dimers. Data is presented from a series of homo-doubly **labeled** NorFES derivs. that differ by the addition of one or two 6-aminohexanoic acids to the peptide backbone. By comparing absorption and fluorescence properties of these **substrates** as a function of temperature, it was examined how such addns. could modify dimerization; the free energy of activation ($\Delta G_{thermod.}$) for intramol. dimer disruption of each **substrate** was calculated. To gain further insight into dye-dye orientation, a NorFES **substrate** modified to facilitate intramol. H-dimerization was **synthesized** with different geometric dye isomers. The data show that length and conformation of the peptide plus **linker** as well as stereochem. of dye-peptide conjugation play important roles in intramol. ground-state complexation. The factors that influence the spectral properties of intramol. H-dimerization support earlier proposed model for H-dimers in NorFES peptides.

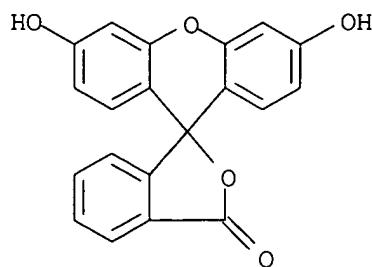
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 48 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1996:161185 CAPLUS
 DOCUMENT NUMBER: 124:197760
 TITLE: Photocleavable agents and conjugates for the detection and isolation of biomolecules.
 INVENTOR(S): Rothschild, Kenneth J.; Sonar, Sanjay M.; Olejnik, Jerzy
 PATENT ASSIGNEE(S): USA
 SOURCE: PCT Int. Appl., 149 pp.
 CODEN: PIXXD2

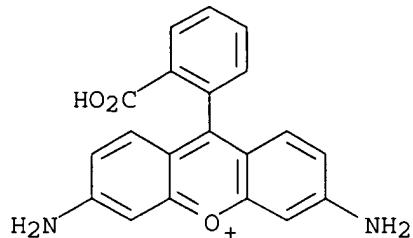
DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9531429	A1	19951123	WO 1995-US5555	19950511
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN				
US 5643722	A	19970701	US 1994-240511	19940511
US 5986076	A	19991116	US 1994-345807	19941122
AU 9526359	A1	19951205	AU 1995-26359	19950511
EP 763009	A1	19970319	EP 1995-921230	19950511
EP 763009	B1	20040908		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10500409	T2	19980113	JP 1995-529698	19950511
EP 1415995	A2	20040506	EP 2003-78381	19950511
EP 1415995	A3	20040512		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
AT 275539	E	20040915	AT 1995-921230	19950511
US 6210941	B1	20010403	US 1999-290325	19990412
US 6344320	B1	20020205	US 1999-307579	19990507
US 6596481	B1	20030722	US 1999-335018	19990617
US 6358689	B1	20020319	US 2000-583243	20000531
US 2002123032	A1	20020905	US 2001-943120	20010830
US 6566070	B2	20030520		
US 2003059785	A1	20030327	US 2001-34736	20011227
US 2004033514	A1	20040219	US 2003-401251	20030327
PRIORITY APPLN. INFO.:				
		US 1994-240511	A	19940511
		US 1994-345807	A	19941122
		EP 1995-921230	A3	19950511
		WO 1995-US5555	W	19950511
		US 1997-884325	A1	19970627
		US 1999-290325	A1	19990412
		US 1999-307579	A1	19990507
		US 1999-335018	A1	19990617
		US 2000-583243	A1	20000531
		US 2000-605483	B1	20000628
		US 2001-943120	A1	20010830

OTHER SOURCE(S): MARPAT 124:197760
 IT 2321-07-5DP, photocleavable derivs. 13558-31-1DP,
 photocleavable derivs.
 RL: ARG (Analytical reagent use); NUU (Other use, unclassified); SPN
 (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES
 (Uses)
 (photocleavable agents and conjugates for detection and isolation of
 biomols.)
 RN 2321-07-5 CAPLUS
 CN Spiro[isobenzofuran-1(3H), 9'-[9H]xanthen]-3-one, 3',6'-dihydroxy- (9CI)
 (CA INDEX NAME)



RN 13558-31-1 CAPLUS
CN Xanthylium, 3,6-diamino-9-(2-carboxyphenyl)-, chloride (9CI) (CA INDEX NAME)

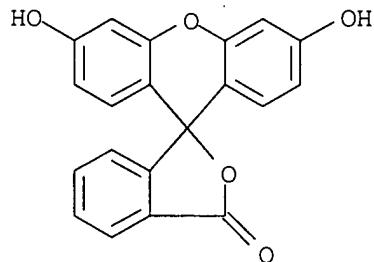


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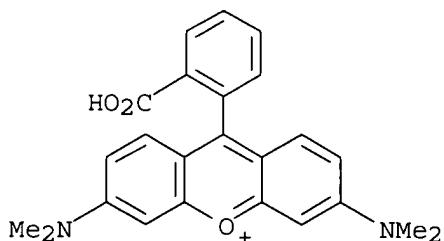
AB This invention relates to agents and conjugates that can be used to detect and isolate target components from complex mixts. such as nucleic acids from biol. samples, cells from bodily fluids, and nascent proteins from translation reactions. Agents comprise a detectable moiety bound to a photoreactive moiety. Conjugates comprise agents coupled to **substrates** by covalent bonds which can be selectively cleaved with the administration of electromagnetic radiation. Target substances **labeled** with detectable mols. can be easily identified and separated from a heterologous mixture of substances. Exposure of the conjugate to radiation releases the target in a functional form and completely unaltered. Using photocleavable mol. precursors as the conjugates, **label** can be incorporated into macromols., the nascent macromols. isolated, and the **label** completely removed. The invention also relates to targets isolated with these conjugates which may be useful as pharmaceutical agents or compns. that can be administered to humans and other mammals. Useful compns. include biol. agents such as nucleic acids, proteins, lipids and cytokines. Conjugates can also be used to monitor the pathway and half-life of pharmaceutical compns. in vivo and for diagnostic, therapeutic and prophylactic purposes. The invention also relates to kits comprised of agents and conjugates that can be used for the detection of diseases, disorders and nearly any individual substance in a complex background of substances.

L11 ANSWER 53 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:243708 CAPLUS
DOCUMENT NUMBER: 114:243708

TITLE: Long range energy transfer on a DNA **substrate**
 AUTHOR(S): Guest, C. R.; Chen, S. M.; Heffron, F. E.; Millar, D. P.
 CORPORATE SOURCE: Dep. Mol. Biol., Res. Inst. Scripps Clin., La Jolla, CA, 92037, USA
 SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (1990), 1204(Time-Resolved Laser Spectrosc. Biochem. 2, Pt. 2), 663-8
 CODEN: PSISDG; ISSN: 0277-786X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 2321-07-5, Fluorescein 70281-37-7, Tetramethyl rhodamine
 RL: ANST (Analytical study)
 (in DNA conformation determination in solution by long-range fluorescence energy transfer **method**)
 RN 2321-07-5 CAPLUS
 CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy- (9CI)
 (CA INDEX NAME)



RN 70281-37-7 CAPLUS
 CN Xanthylium, 9-(2-carboxyphenyl)-3,6-bis(dimethylamino)-, chloride (9CI)
 (CA INDEX NAME)



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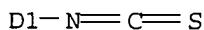
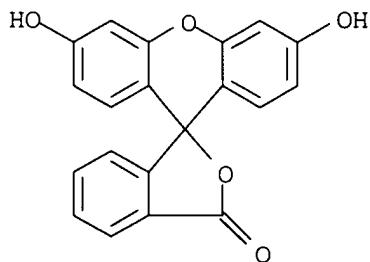
AB The technique of long-range electronic energy transfer was used to obtain structural data on nucleic acids in solution. Fluorescent chromophores were attached covalently via an aminoethyl **linker** to the 5'-terminus of a synthetic oligonucleotide. Duplexes were formed with an energy donor, fluorescein, at one end and an acceptor, tetra-Me rhodamine, at the other. The rate of energy transfer was determined from the fluorescence decay of the donor that was measured with a picosecond photon-counting system.

The effects of dye:DNA interactions cause addnl. quenching of the donor fluorescence and must be considered in the interpretation of the energy transfer expts. An apparent donor:acceptor distance of 40.9 Å was calculated for a 12 base pair **labeled** duplex.

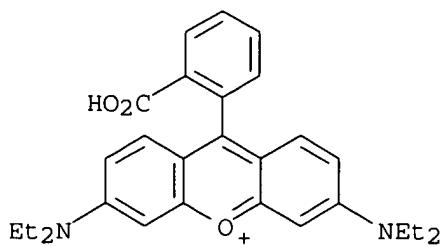
L11 ANSWER 56 OF 58 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1986:494120 CAPLUS
 DOCUMENT NUMBER: 105:94120
 TITLE: **Methods of assay**
 INVENTOR(S): Allen, Gerald John
 PATENT ASSIGNEE(S): Serono Diagnostics Partners, USA
 SOURCE: Eur. Pat. Appl., 18 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 177191	A1	19860409	EP 1985-306272	19850904
EP 177191	B1	19901122		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
ZA 8506789	A	19860528	ZA 1985-6789	19850904
CA 1261745	A1	19890926	CA 1985-490004	19850904
AU 592315	B2	19900111	AU 1985-47125	19850904
AU 8547125	A1	19860320		
AT 58600	E	19901215	AT 1985-306272	19850904
PRIORITY APPLN. INFO.:			GB 1984-22452	A 19840905
			EP 1985-306272	A 19850904

IT 27072-45-3D, ligand analog conjugates 36877-69-7D,
 ligand analog conjugates
 RL: ANST (Analytical study)
 (ligand determination with improved immunometric assay containing)
 RN 27072-45-3 CAPLUS
 CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy-5(or
 6)-isothiocyanato- (9CI) (CA INDEX NAME)



RN 36877-69-7 CAPLUS
 CN Xanthylium, 9-[2-carboxy-5(or 6)-isothiocyanatophenyl]-3,6-bis(diethylamino)-, chloride (9CI) (CA INDEX NAME)



D1—N≡C=S

● Cl⁻

AB A 1-site immunometric assay for determining a ligand (e.g. nonpeptide hormones and metabolites) in a biol. sample involves (a) incubating the sample, a directly **labeled** specific binding partner to the ligand, and a ligand analog-reagent conjugate; (b) separating the ligand analog-reagent conjugate from the incubation mixture with a solid phase carrying a binding partner specific for the reagent; and (c) determining the extent of complexing between the **label** and ligand analog-reagent conjugate by measuring the **label**. Thus, for T4 determination, a sample was incubated with β -galactosidase- **labeled** T4 monoclonal antibodies and T4-FITC. After a suitable incubation time, anti-FITC magnetizable cellulose particles were added to the mixture. The enzyme actively associated with the particles was determined spectrometrically with p-nitrophenyl- β -D-galactopyranoside as **substrate**. T4 concns. (0, 5, 50, 500 ng/Ml) were determined in standard solns.

=> log Y			
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STN INTERNATIONAL LOGOFF AT 11:17:18 ON 15 MAR 2005